Management Action Plan

Public Version

Tinker Air Force Base
Oklahoma
January 2004

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Executive Summary

This Management Action Plan (MAP) describes the integrated, coordinated approach of conducting the environmental restoration program (ERP) activities required at Tinker Air Force Base. A general overview of the installation and restoration sites is provided to assist in communicating with state and federal regulators and the public to develop a comprehensive and meaningful plan useful to all.

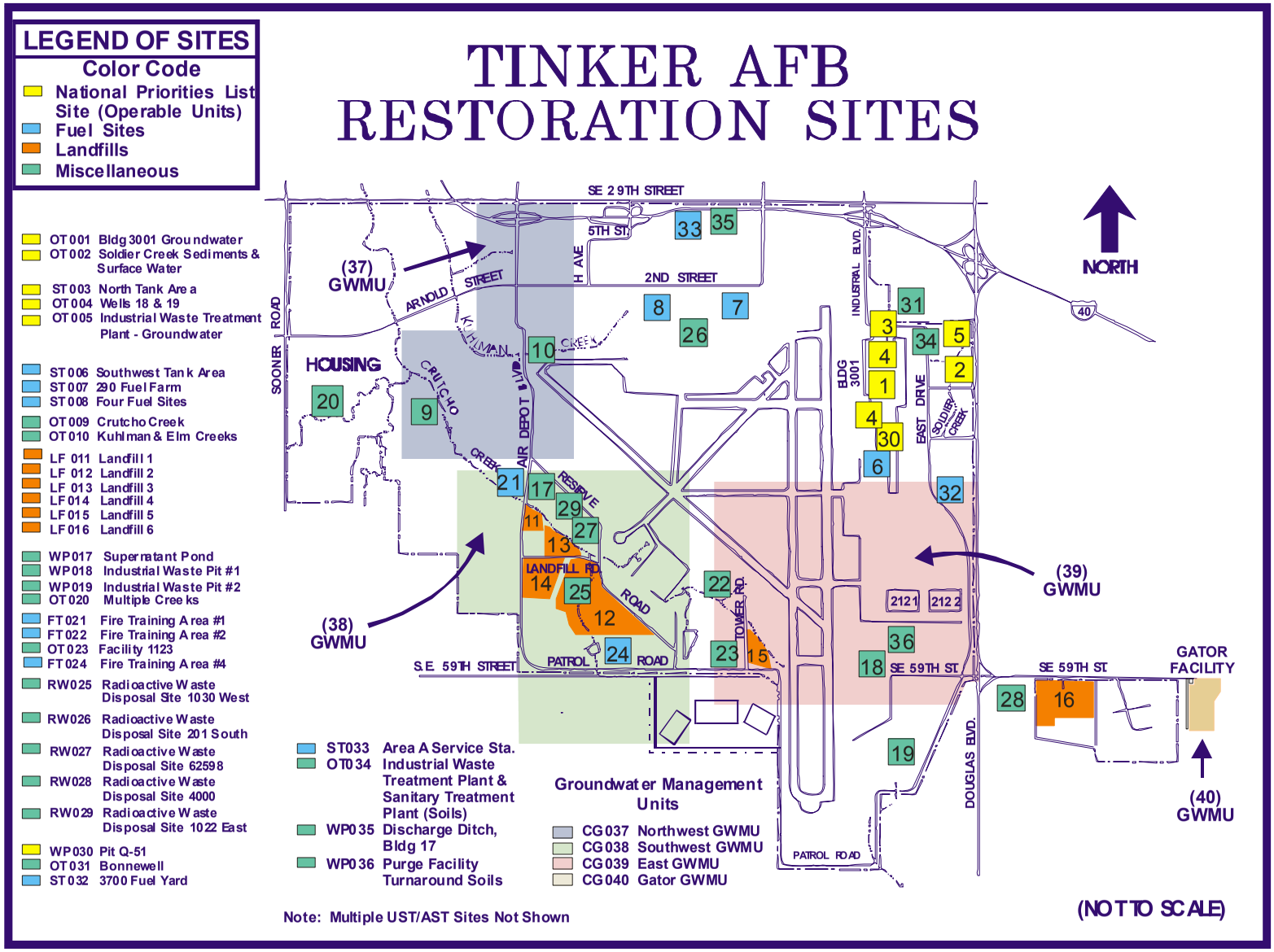
This MAP summarizes the status of the Tinker Air Force Base ERP and identifies specific program issues to promote effective investigation and cleanup strategies. The focus of the MAP is to get cleanup remedies in place (RIP) and to attain response complete (RC) as early as possible. Meeting RIP/RC schedules will ensure a corresponding reduction in risk. Consequently, the MAP presents a comprehensive strategy for funding and implementing response actions necessary to protect human health and the environment.

Formal updates to this MAP use data from the Air Force Restoration Information Management System (AFRIMS). Information and estimates provided on costs, schedules, relative risk, and remedial activities, do not necessarily represent those that have been, or will be approved, by the Air Force, state or federal regulatory agencies. The cost estimates are made based on best available information at this time, and may dramatically vary over time.

Tinker Air Force Base is in the process of planning and executing environmental response actions to address contamination resulting from past installation operations. Environmental response actions are planned and executed under the ERP in a manner consistent with the Comprehensive Environmental Response, Compensation, and Liability Act, as amended (CERCLA) and other applicable laws. The ERP generally addresses contamination due to releases of hazardous substances or petroleum products that occurred prior to January 1984.

The data in this MAP is taken from the AFRIMS database as of Tuesday, January 06, 2004

TINKER AFB
RESTORATION SITES



Installation Summary

Tinker Air Force Base
OC-ALC/EMPE
7701 Arnold Street
Tinker AFB, OK 73145-9100

Tinker Air Force Base is located in EPA Region 06. The Installation Federal Facility ID is OK657172439100.

Number of sites:	40 Sites & 0 AOCs
Prior year funding (FY03):	$7,330,000
Current funding (FY04):	Displayed only for internal release
Future funding (FY05-Finish):	$38,347,000

Milestones for program completion.

All Sites/AOCs have achieved:	Remedy in Place (RIP)	7/15/2008
	Response Complete (RC):	9/30/2023
	Site Complete (SC)	9/30/2028

Installation History:

From an initial planned size of 960 acres in 1941, Tinker has grown to 5,020 acres with approximately 15.5 million square feet of floor space in over 700 buildings, 136 acres of indoor maintenance area, and 254 acres of ramp area.

History of environmental restoration efforts at the installation:

Restoration Progress to Date:
Starting in the mid-1980's, work has been performed at 40 sites such as landfills, USTs, waste pits, fire training areas, and spill sites. Actions include soil and UST removals, landfill caps, pump and treat systems and free-product recovery systems.

Types of operations at the installation:

Tinker serves as a repair depot for a variety of aircraft, weapons, and engines. Activities require use of hazardous materials and result in generation of hazardous wastes including solvents, paint strippers, various industrial wastewaters, and sludges.

General environmental setting at the installation:

Tinker covers part of the Garber-Wellington aquifer, which is the single most important source of potable groundwater in the Oklahoma City area. Shallow groundwater contamination at Tinker has not had a major impact on production zones of the aquifer.

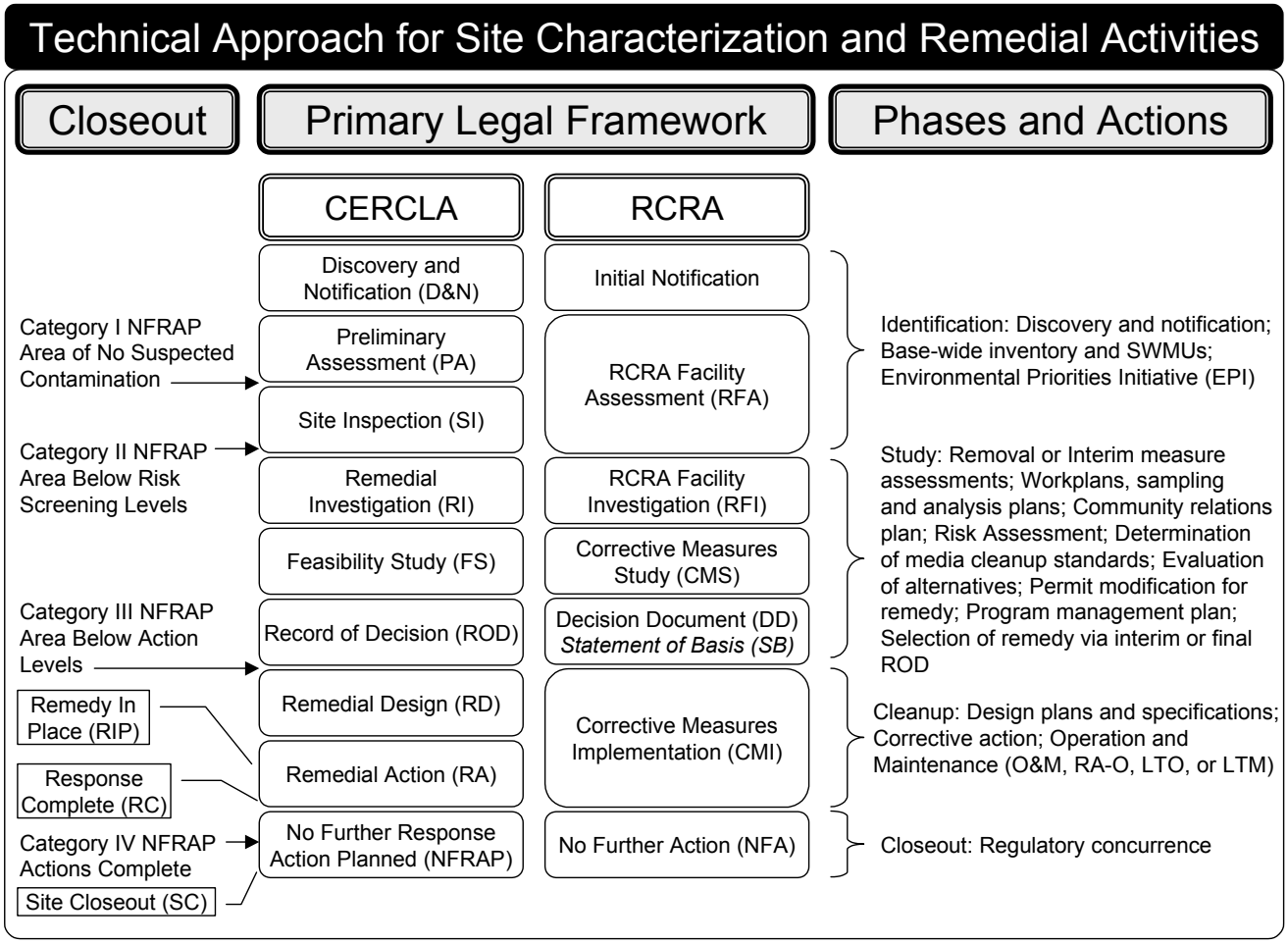
An outline of the technical approach

The technical approach taken at each ERP site has the following goals:

1) Pursue remedial action strategies that are cost-effective while being fully protective of human health and the environment.
2) Offer open and sustained input into remediation decisions for all stakeholders.
3) Use partnerships and consensus building with regulatory agencies to define and execute cleanup requirements.
4) Contain and clean up sites that are above maximum contaminant levels or other risk-based levels; treat contaminants and clean up to background levels if technically and economically feasible.

The Air Force is committed to developing cleanup strategies that support Department of Defense (DoD) policy to reduce relative risk, prevent future contamination, achieve compliance, develop partnerships, involve stakeholders, evaluate cost and performance, comply with legal agreements, and consider future land

use. The figure below identifies the major steps and actions that guide the ERP process at each site.



List of current year projects:

Project List

FY	CMD	INST	REQ NO	Description	Service	Phase	Risk	Legal	Pri	Agent
2004	MTC	TIK	WWYK20041018	O&M Multiple Sites RA-O	AF	RA-O	NR	A	5A	BCO
2004	MTC	TIK	WWYK20041018B	O&M Multiple Sites IRA-O	AF	IRA-O	H	C	1A	BCO
2004	MTC	TIK	WWYK20041087	Southwest GWMU (CG038) - RA-C	AF	RA-C	H	C	1A	BCO
2004	MTC	TIK	WWYK20041088	East GWMU (CG039) - RA-C	AF	RA-C	H	C	1A	BCO
2004	MTC	TIK	WWYK20041189	Basewide Creek LTM	AF	LTM	NR	C	5B	BCO
2004	MTC	TIK	WWYK20041201	O&M Landfill Caps LTM	AF	LTM	NR	C	5B	BCO
2004	MTC	TIK	WWYK20041206A	CG040 RD	AF	RD	H	C	1A	BCO
2004	MTC	TIK	WWYK20049101	ERP TDY	AF	MGT	NR	Z	0M	BCO
2004	MTC	TIK	WWYK20049102	ERP Supplies and Equipment	AF	MGT	NR	Z	0M	BCO
2004	MTC	TIK	WWYK20049103	ERP Manpower	AF	MPR	NR	Z	0M	BCO
2004	MTC	TIK	WWYK20049105	ERP Technical Support	AF	MGT	NR	Z	0M	GSA
2004	MTC	TIK	WWYK20049106	ERP RAB Support	AF	RAB	NR	Z	0M	GSA
2004	MTC	TIK	WWYK20049108	ERP Administrative Record Support	AF	MGT	NR	Z	0M	GSA
2004	MTC	TIK	WWYK20049109	GSA Lease Vehicles	AF	MGT	NR	Z	0M	GSA

RAB information:

A Technical Review Committee (TRC) was formed at Tinker Air Force Base on Jan 16, 1985. A Restoration Advisory Board (RAB) was formed on May 1, 1995.

RAB Activities:

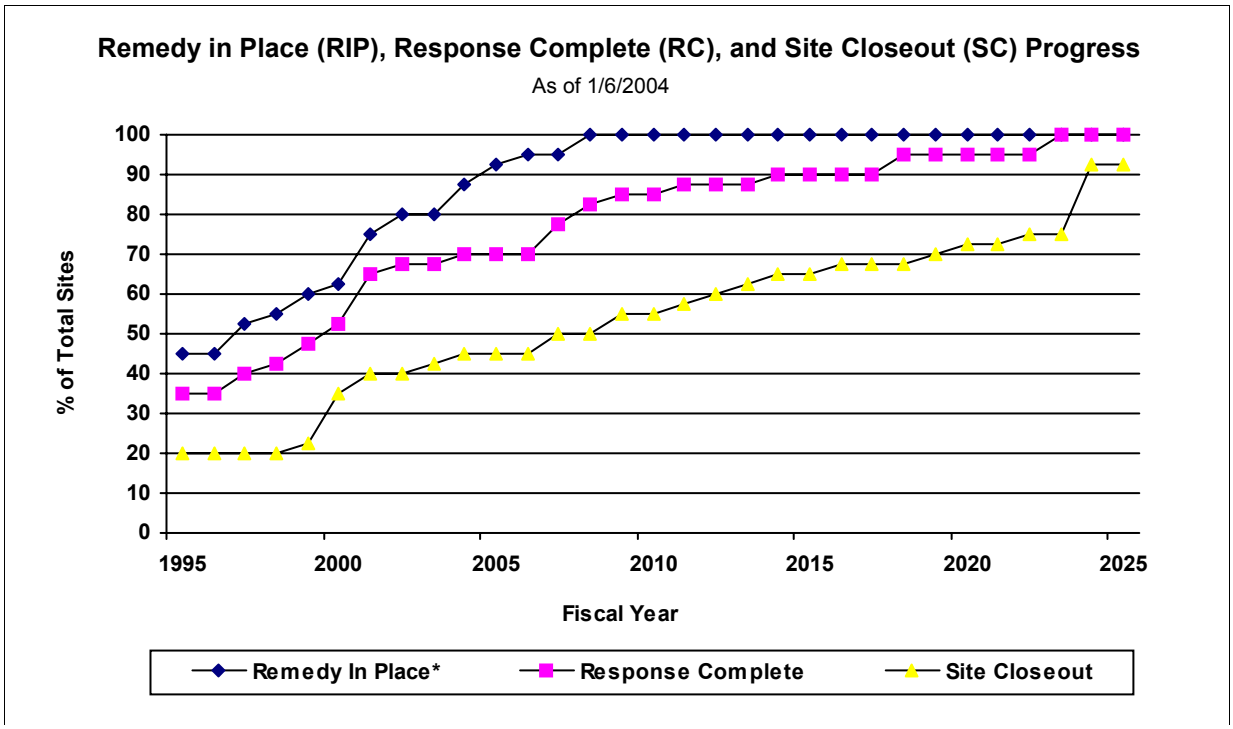
Established partnerships among stakeholders
Improved installation credibility
Provided comments or advice
Reviewed plans and technical documents

Justification for funding sites

The primary focus of the Tinker Air Force Base ERP is protection of human health and the environment. This focus lead the Department of Defense to create goals, which focus restoration efforts on the 'worst' sites first. Priorities are established using a relative risk ranking system. However, a relative risk ranking is not required for sites with a remedial action in place so that operations and maintenance for these sites will be funded even though the relative risk is not 'High'. Parties with an active interest in the Tinker Air Force Base ERP have been made aware of funding priorities and the approximate range of costs associated with these cleanup activities and have generally agreed with the funding priorities.
Funding at each site is established using a 'risk plus other factors' priority ranking which includes the following evaluations:

a) cultural, social, and economic factors, including environmental justice considerations;
b) potential or future use of the facility, its effect on the local communities' economy, vitality, livability, and environmental quality;
c) the ecological impacts of the contamination and the proposed action to address it (in those instances where protection of the environment is not used as a primary basis for establishing cleanup funding priorities);
d) intrinsic and future value of affected resources (e.g., groundwater and fisheries);
e) pragmatic considerations such as availability and continuity of skilled workers, labs, cleanup contractors to complete the activity or the feasibility of carrying out the activity in relation to other activities at the facility (i.e., capacity and work flow logic), or both;
f) the overall cost and cost effectiveness of a proposed activity and especially the relative risk reduction value obtained by the proposed expenditure;
g) making land available for other uses, recognizing that land uses may change over time;
h) the importance of reducing infrastructure costs (e.g., $300 million is spent each year to monitor tanks at Hanford and $130 million is spent each year at Rocky Flats to safeguard special nuclear material);
i) the availability of new or innovative technologies that might accelerate or improve the ability to achieve a permanent remedy;
j) Native American treaties, statutory rights (e.g., American Indian Religious Freedom Act), and trust responsibilities;
k) regulatory requirements and the acceptability of the proposed action to regulators and other stakeholders;
l) supporting accomplishment of other high priority agency objectives;
m) life-cycle costs; and
n) actual and anticipated funding levels (the congressional budget appropriation, OMB apportionment, allotments of funds to agencies or departments and the facilities, and out year funding targets).

RIP, RC and SC Progress:

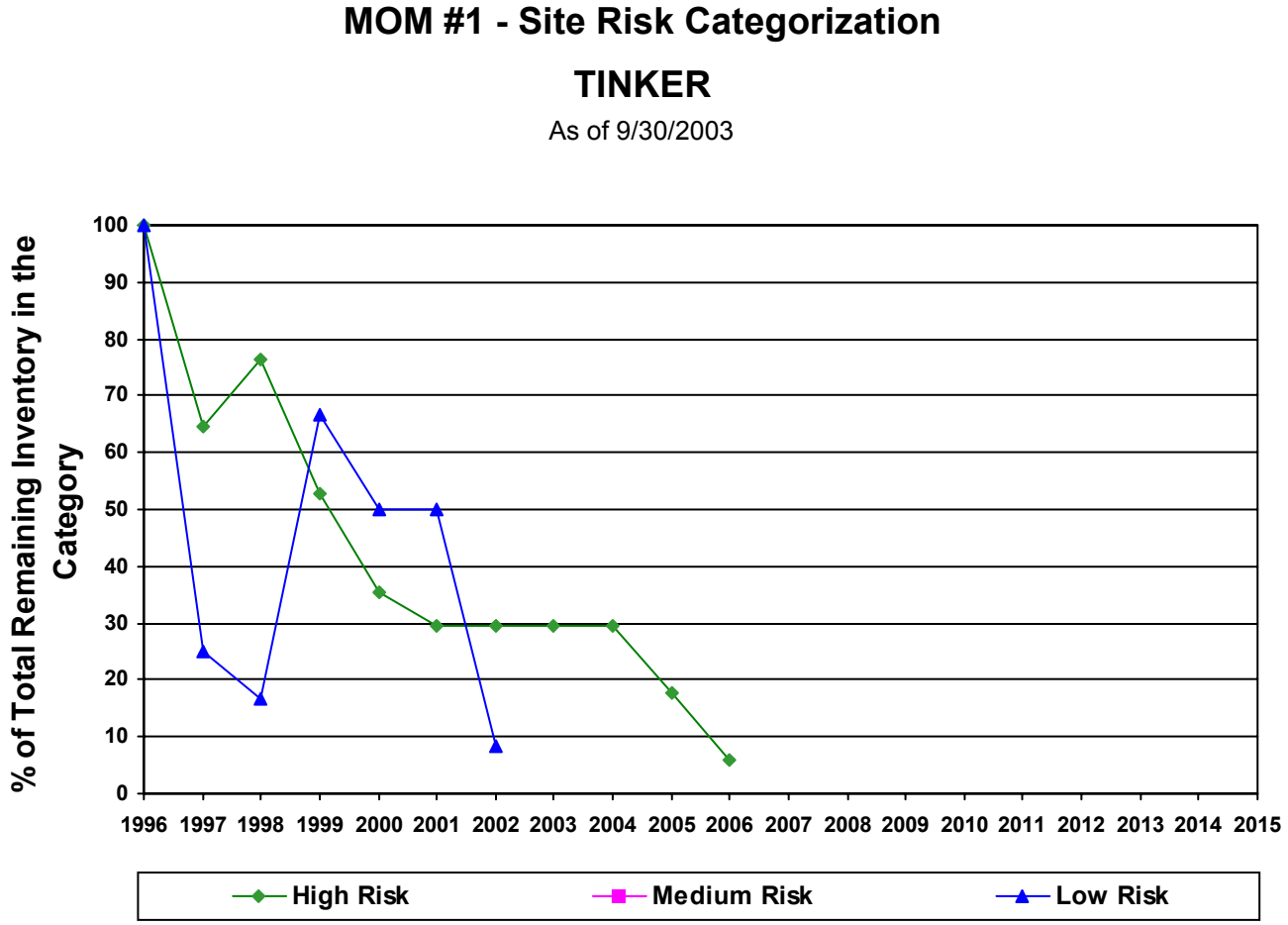


Site Summaries

AIR FORCE INSTALLATION RESTORATION PROGRAM
WORK IN PROGRESS - INVENTORY CONTROL MANAGEMENT
As of 9/30/2003

Site ID	Site/AOC	Relative Risk	RIP	RC	SC	IRA Status	ICM Category
OT001	Site	NR	06/01/1994	09/30/2023	09/30/2028		RA-O
OT002	Site	NR	09/14/1993	12/09/1999	09/30/2004		LTM
ST003	Site	NR	05/01/1991	03/01/2007	09/30/2028		RA-O
OT004	Site	NR	02/01/1990	06/01/1991	06/01/1991		NFRAP IV
OT005	Site	High	08/31/2004	09/30/2023	09/30/2028	Operation	ROD/DD
ST006	Site	NR	03/01/1997	03/01/2007	03/01/2007		RA-O
ST007	Site	NR	06/21/2002	10/01/2013	10/01/2018		RA-O
ST008	Site	High	02/28/2004	02/28/2004	12/01/2019	Operation	RI
OT009	Site	NR	09/17/1993	09/17/1993	10/01/2008		LTM
OT010	Site	NR	09/17/1993	09/17/1993	10/01/2008		LTM
LF011	Site	NR	07/25/2001	07/25/2001	12/01/2023		LTM
LF012	Site	NR	07/25/2001	07/25/2001	12/01/2023		LTM
LF013	Site	NR	07/11/2001	07/11/2001	12/01/2023		LTM
LF014	Site	NR	10/29/2001	10/29/2001	12/01/2023		LTM
LF015	Site	NR	09/21/2001	09/21/2001	12/01/2023		LTM
LF016	Site	NR	06/01/2001	06/01/2001	12/01/2023		LTM
WP017	Site	NR	09/24/1993	09/24/1993	06/01/2011		LTM
WP018	Site	MED	07/15/2008	07/15/2008	07/15/2012		ROD/DD
WP019	Site	NR	10/01/1985	05/06/1997	09/19/2003		NFRAP IV
OT020	Site	NR	06/01/1991	06/01/1991	06/01/1991		NFRAP I
FT021	Site	NR	09/30/1997	09/30/1997	12/22/1999		NFRAP IV
FT022	Site	NR	06/12/1992	09/30/1992	10/23/2000		NFRAP IV
OT023	Site	NR	06/28/1991	06/28/1991	06/28/1991		NFRAP II
FT024	Site	NR	08/24/1990	08/24/1990	08/25/1990		NFRAP I
RW025	Site	NR	07/22/1999	07/22/1999	12/09/1999		NFRAP III
RW026	Site	NR	07/22/1999	07/22/1999	12/22/1999		NFRAP III
RW027	Site	NR	09/01/1991	09/01/1991	12/22/1999		NFRAP IV
RW028	Site	NR	06/01/1991	06/01/1991	06/01/1991		NFRAP I
RW029	Site	NR	04/01/1991	09/01/1991	12/22/1999		NFRAP IV
WP030	Site	NR	06/12/1991	06/12/1991	06/12/1991		NFRAP IV
OT031	Site	NR	06/01/1991	06/01/1991	06/01/1991		NFRAP I
ST032	Site	NR	07/20/1997	04/07/1998	09/22/1999		NFRAP IV
ST033	Site	NR	05/01/1998	09/15/2007	09/15/2007		RA-O
OT034	Site	MED	02/15/2004	01/15/2011	01/15/2016	Operation	FS
WP035	Site	NR	09/01/1992	09/01/1992	09/29/1992		NFRAP III
WP036	Site	NR	10/13/1999	10/13/1999	08/31/2001		NFRAP III
CG037	Site	MED	12/01/2007	12/01/2007	12/01/2012	Operation	ROD/DD
CG038	Site	High	01/15/2006	12/30/2017	07/01/2022	Operation	FS
CG039	Site	High	11/01/2004	07/01/2018	10/01/2023	Operation	RI
CG040	Site	High	07/01/2005	06/30/2009	06/30/2014	Operation	RI

Measure of Merit (MOM) #1 - Site Risk Categorization



OT001

Site Name: Building 3001 Groundwater
Current site phase status: RA-O
Relative Risk: NR
Prior year funding (FY03): $1,017,132
Current funding (FY04): Displayed only for internal release
Future funding (FY05-Finish): $2,822,000

Site description:

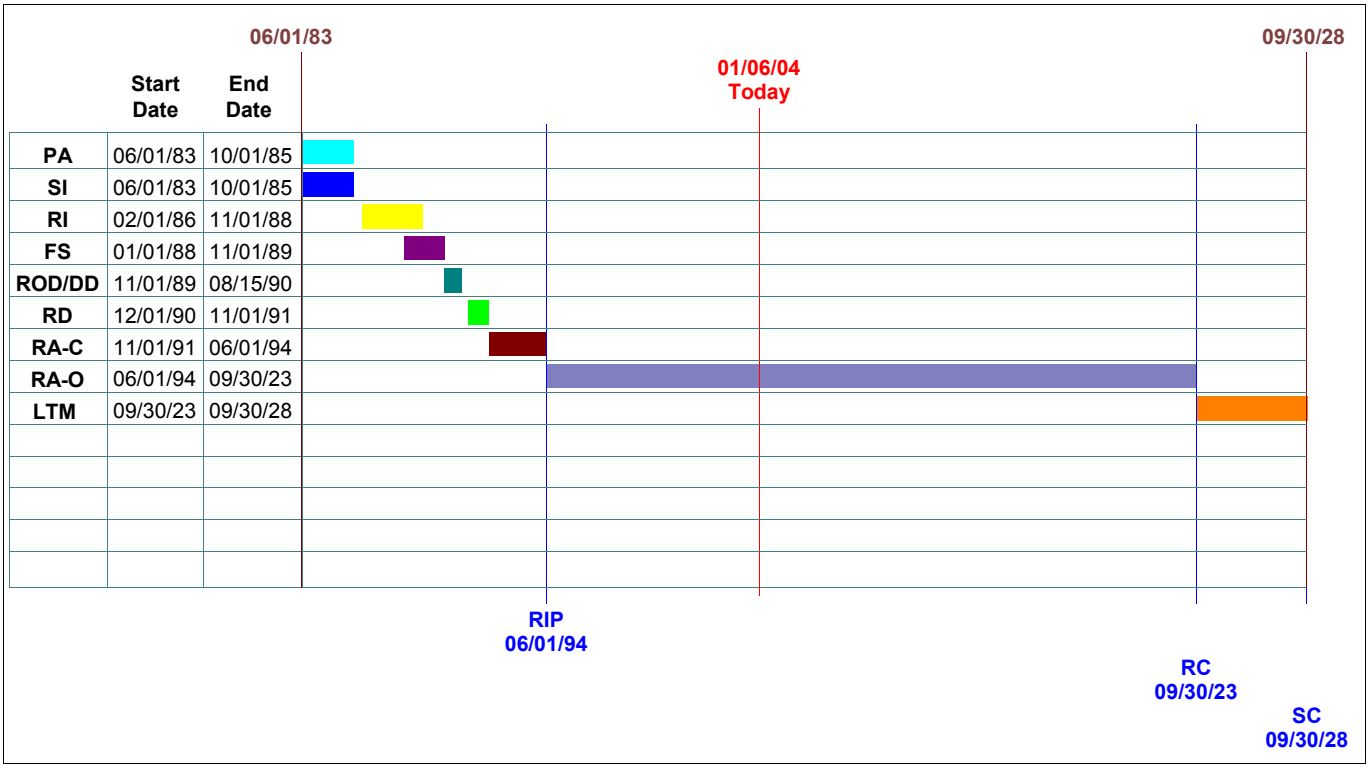
This site has final remedy in place.

Remedy Type:

Remedy Type	Phase	Start Date	End Date
Groundwater treatment	RA-C	11/01/91	06/01/94

Site Phase Schedule

MAJCOM: AFMC **Installation:** TINKER **Site ID:** OT001
Relative Risk: NR



OT002

Site Name:	Soldier Creek Sediments and Surface Water
Current site phase status:	LTM
Relative Risk:	NR
Prior year funding (FY03):	$162,854
Current funding (FY04):	Displayed only for internal release
Future funding (FY05-Finish):	$0

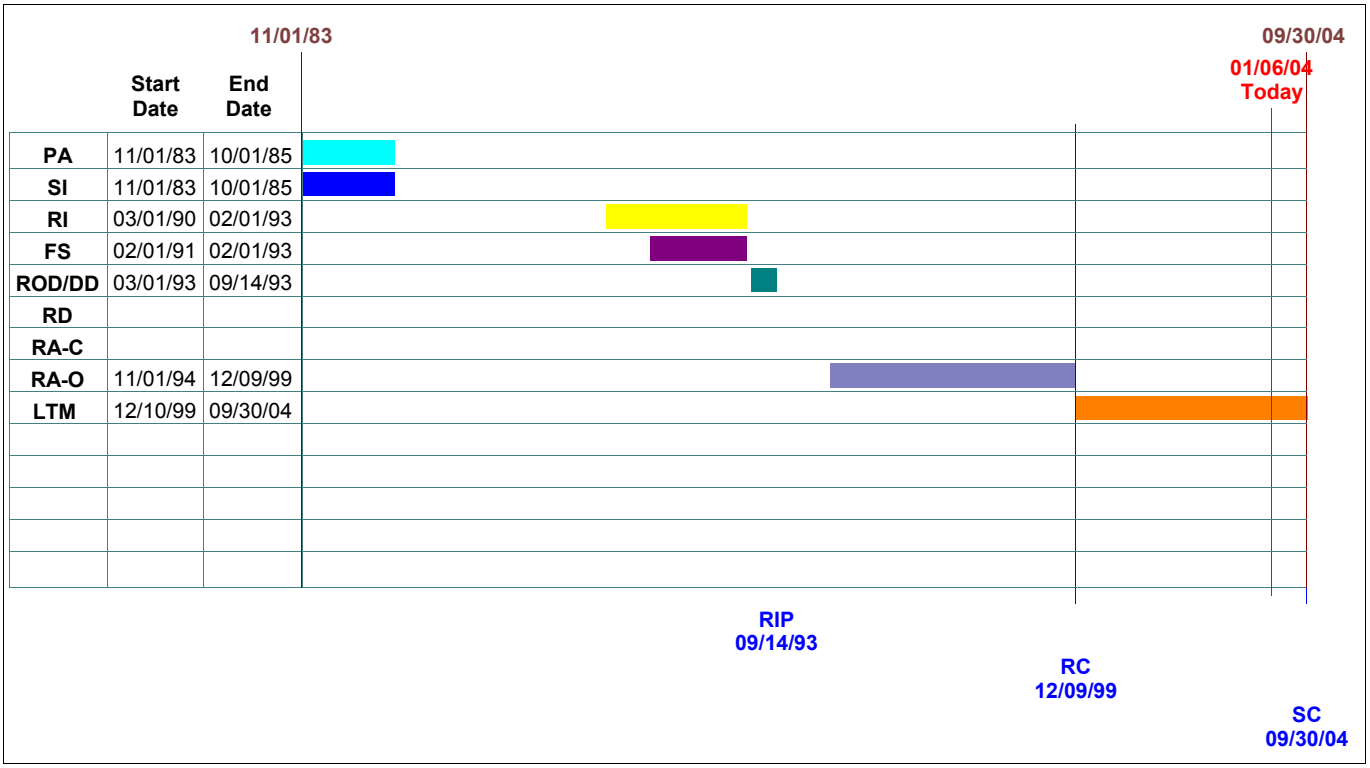
Site description:

Soldier Creek drains the northeast corner of Tinker AFB, including Building 3001. In the past, cross-connections existed between industrial waste lines and the storm drains leading to Soldier Creek. These cross-connections caused the creek to become contaminated with solvents (from degreasing operations) and metals used in plating. In addition, fuel spills have contributed contamination. Many cross-connections were located and removed in 1990.

Site Phase Schedule

MAJCOM: AFMC **Installation:** TINKER **Site ID:** OT002

Relative Risk: NR



ST003

Site Name: North Tank Area
Current site phase status: RA-O
Relative Risk: NR
Prior year funding (FY03): $571,856
Current funding (FY04): Displayed only for internal release
Future funding (FY05-Finish): $825,000

Site description:

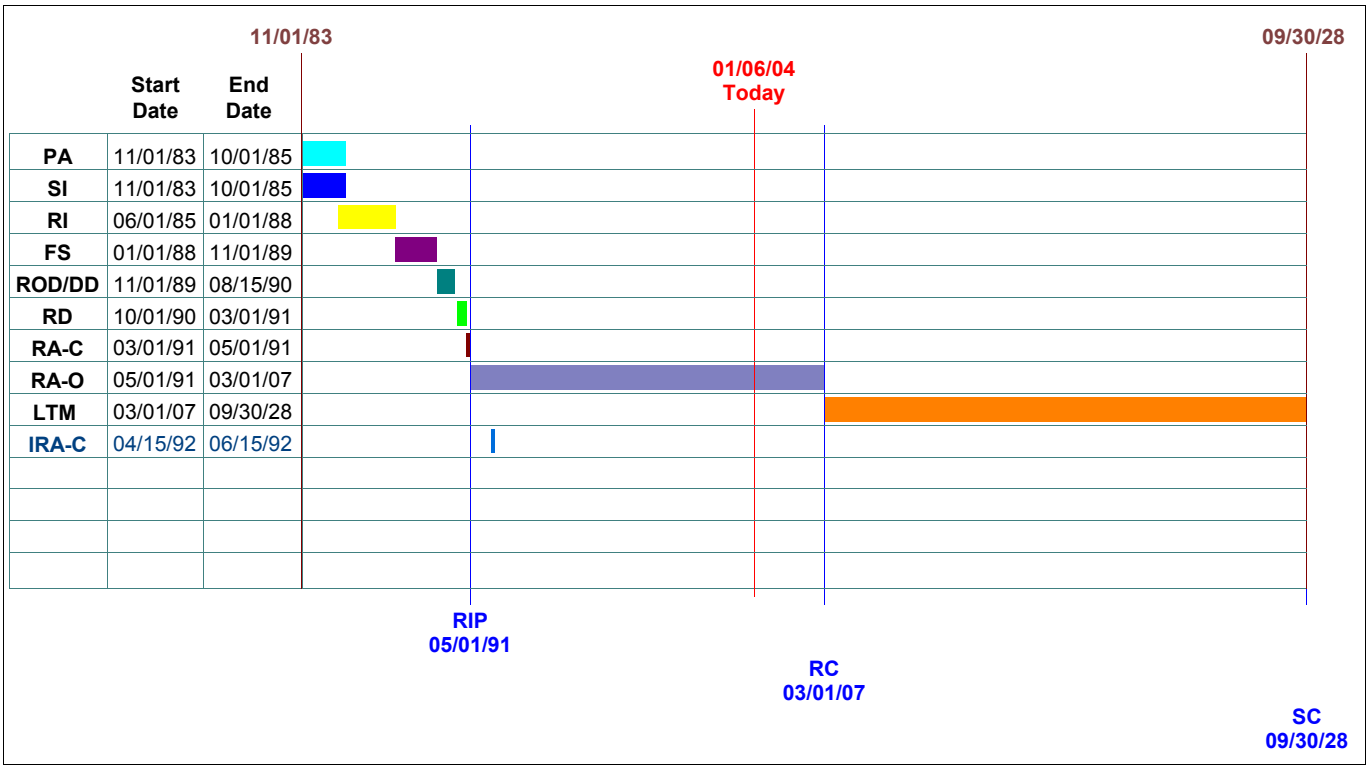
This site has final remedy in place.

Remedy Type:

Remedy Type	Phase	Start Date	End Date
Free product recovery	RA-C	03/01/91	05/01/91
Waste removal - drums, tanks, bulk containers	IRA-C	04/15/92	06/15/92

Site Phase Schedule

MAJCOM: AFMC **Installation:** TINKER **Site ID:** ST003
Relative Risk: NR



OT004

Site Name: Wells 18 & 19
Current site phase status: NFRAP IV
Relative Risk: NR
Prior year funding (FY03): $0
Current funding (FY04): Displayed only for internal release
Future funding (FY05-Finish): $0

Site description:

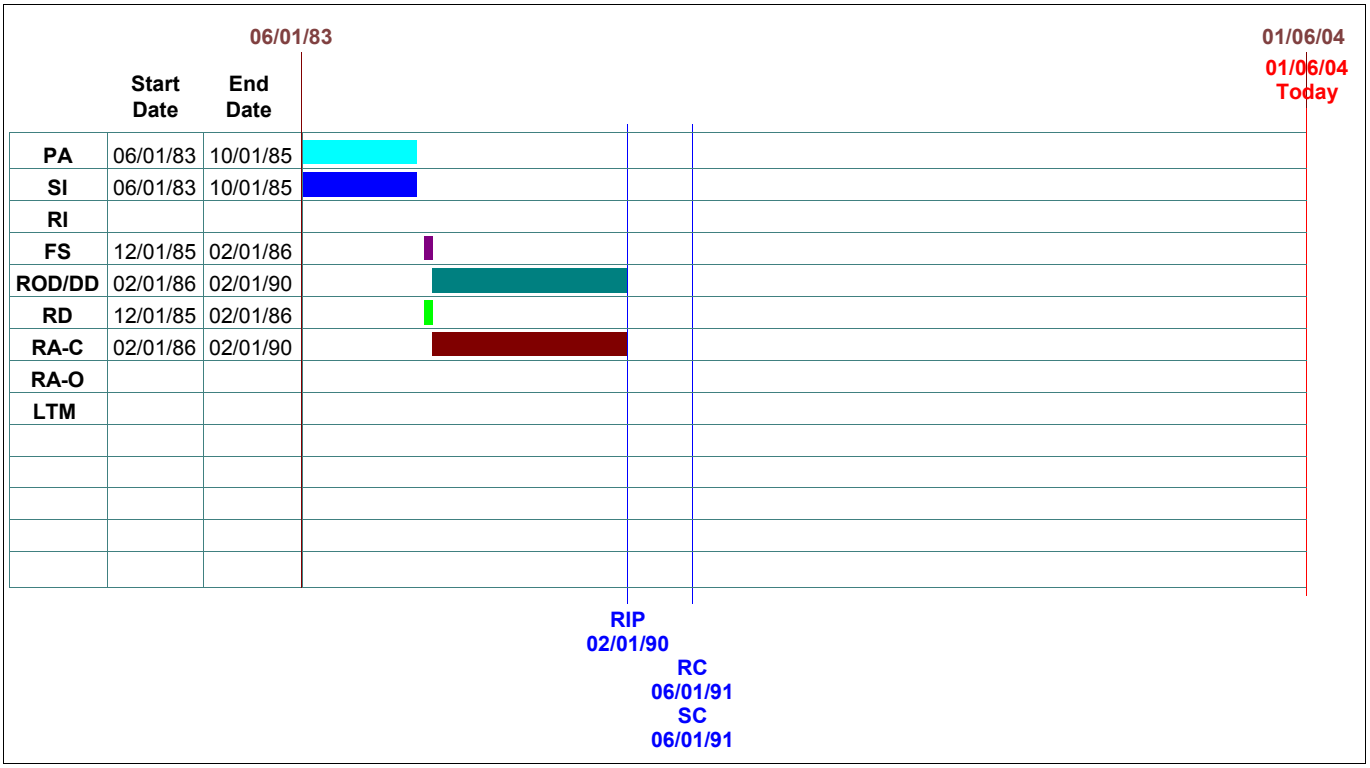
This site has final remedy in place.

Remedy Type:

Remedy Type	Phase	Start Date	End Date
Groundwater treatment	RA-C	02/01/86	02/01/90

Site Phase Schedule

MAJCOM: AFMC **Installation:** TINKER **Site ID:** OT004
Relative Risk: NR



OT005

Site Name: IWTP and Soldier Creek Groundwater
Current site phase status: ROD/DD
Relative Risk: High
Prior year funding (FY03): $619,604
Current funding (FY04): Displayed only for internal release
Future funding (FY05-Finish): $521,000

Site description:

The IWTP Off-Base Groundwater Operable Unit consists of approximately 960 acres of private commercial and residential properties located northeast of Tinker AFB. During the period from the 1940's to the 1970's industrial solvents and waste waters inside Building 3001 were contained in subsurface pits and trenches. Over a period of time the pits and trenches leaked and allowed percolation and subsurface migration of contaminants. The primary contaminants are TCE and chromium (Cr). Other organic contaminants identified in this area include chlorobenzene, 1,1-dichloroethene, 1,2-dichloroethene, PCE, 1,2-dichloropropane, and vinyl chloride.

The pathways of concern for the IWTP Groundwater Project are exposure to contaminants in the groundwater underlying the site, and exposure contaminants which may have traveled with the groundwater and infiltrated into Soldier Creek.

Potential receptors include human exposure to contaminants in the groundwater and possible human and ecological exposure to the contaminants in Soldier Creek. Potential for human exposure to water contaminated by this site exists because Tinker AFB and the surrounding communities of Midwest City and Del City derive their water supplies from the Garber-Wellington Aquifer (Class II-A).

Contaminants of concern:

Media	Contaminant	Sample Result	Units
Ground water	1,1,1,2-Tetrachloroethane	390	ug/L
Ground water	1,1-Dichloroethane	140	ug/L
Ground water	Benzene	24	ug/L
Ground water	Chlorobenzene	360	ug/L
Ground water	Ethylene Dichloride	580	ug/L
Ground water	Trichloroethylene (TCE)	410	ug/L
Ground water	Vinyl Chloride	280	ug/L
Surface water	Bromodichloromethane	6	ug/L
Surface water	Bromoform	4	ug/L
Surface water	Chloroform	6	ug/L
Surface water	Dibromochloromethane	5	ug/L
Surface water	Lead	0	ug/L
Surface water	Nickel (Soluble Salts)	0	ug/L
Surface water	Selenium	0	ug/L
Surface water	Tetrachloroethylene	3	ug/L

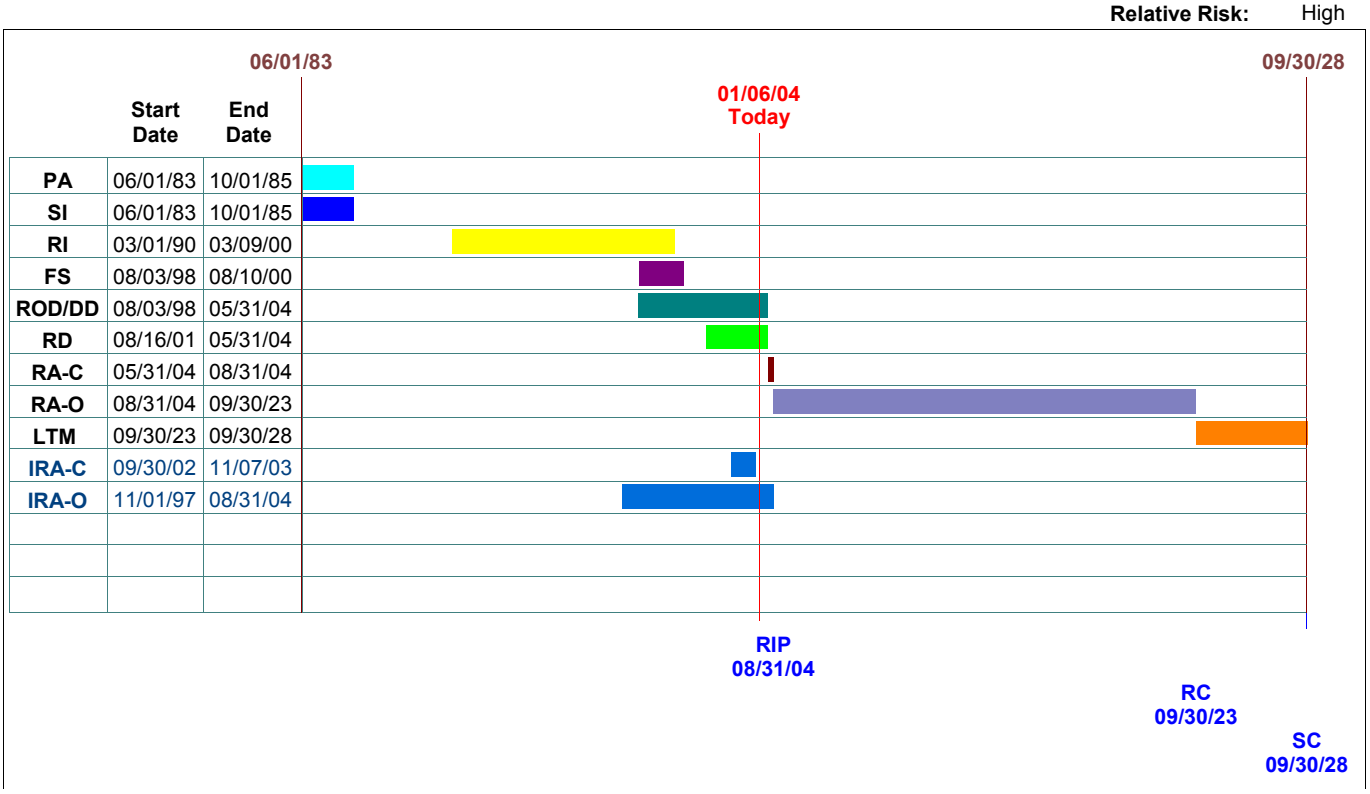
Remedy Type:

Remedy Type	Phase	Start Date	End Date
Long-term monitoring	IRA-O	11/01/97	08/31/04
Groundwater treatment	IRA-C	09/30/02	11/07/03
Groundwater treatment	RA-C	05/31/04	08/31/04

Site Phase Schedule

MAJCOM: AFMC **Installation:** TINKER **Site ID:** OT005

Relative Risk: High



ST006

Site Name: Southwest Tank Area
Current site phase status: RA-O
Relative Risk: NR
Prior year funding (FY03): $94,843
Current funding (FY04): Displayed only for internal release
Future funding (FY05-Finish): $181,000

Site description:

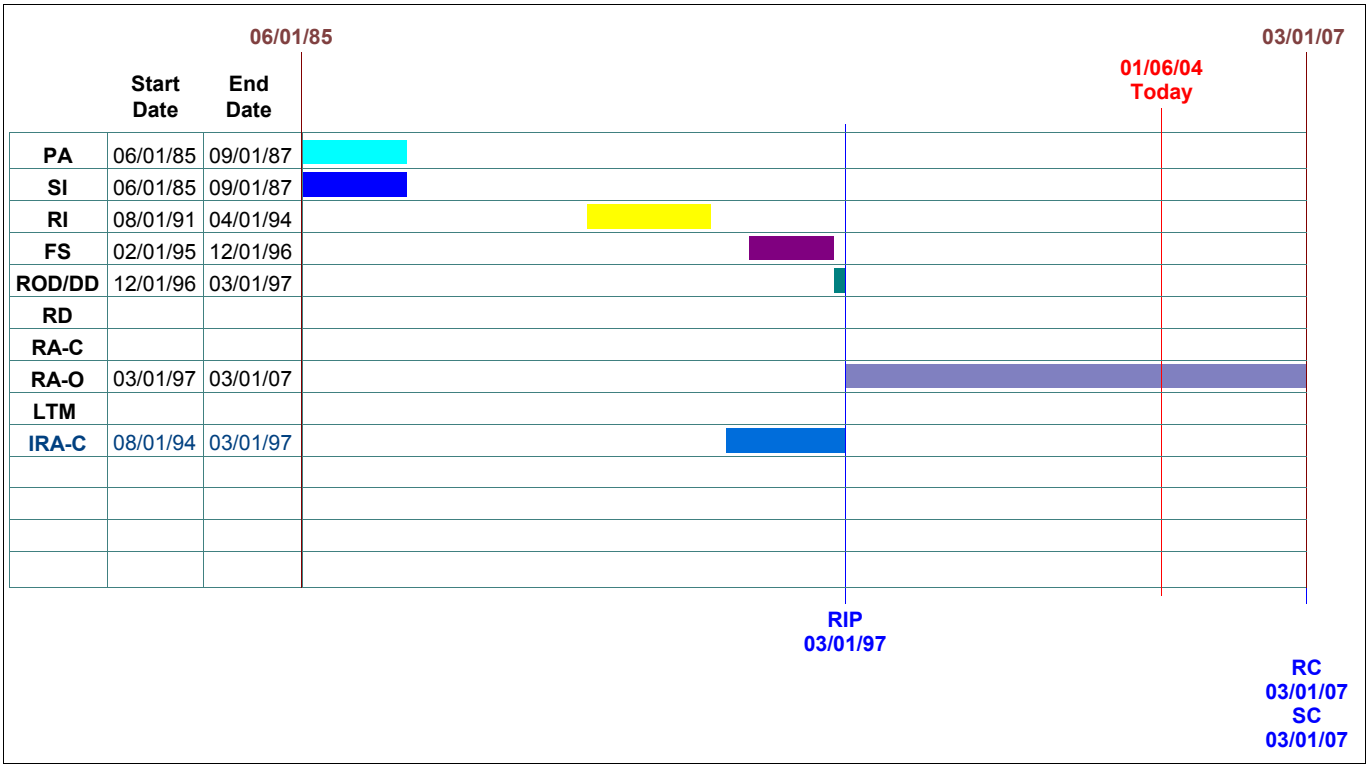
This site has final remedy in place.

Remedy Type:

Remedy Type	Phase	Start Date	End Date
Bioremediation - in situ groundwater	IRA-C	08/01/94	03/01/97

Site Phase Schedule

MAJCOM: AFMC **Installation:** TINKER **Site ID:** ST006
Relative Risk: NR



ST007

Site Name: 290 Fuel Farm
Current site phase status: RA-O
Relative Risk: NR
Prior year funding (FY03): $297,481
Current funding (FY04): Displayed only for internal release
Future funding (FY05-Finish): $587,000

Site description:

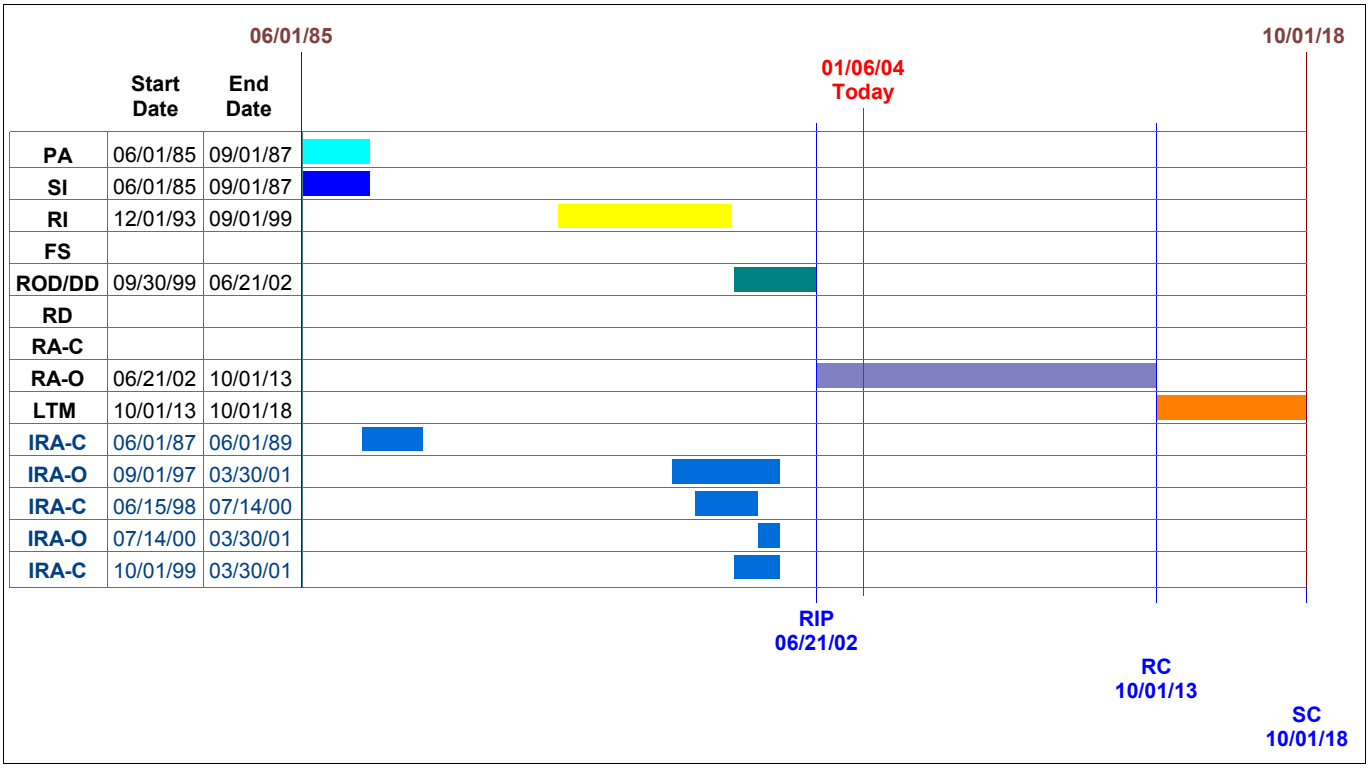
The 290 Fuel Farm opened in 1942 with five 18,000 gallon underground storage tanks (USTs) and twelve 25,000 gallon USTs. In 1952, eight additional 25,000 gallon USTs were added. In 1988, all USTs were abandoned in place and replaced with aboveground storage tanks. The USTs were used to store motor fuels, JP-4 jet fuel, and aviation gas.

Remedy Type:

Remedy Type	Phase	Start Date	End Date
Waste removal - drums, tanks, bulk containers	IRA-C	06/01/87	06/01/89
Long-term monitoring	IRA-O	09/01/97	03/30/01
Groundwater treatment	IRA-C	06/15/98	07/14/00
Free product recovery	IRA-C	10/01/99	03/30/01
Air stripping	IRA-O	07/14/00	03/30/01
Free product recovery	IRA-O	03/30/01	06/20/02

Site Phase Schedule

MAJCOM: AFMC **Installation:** TINKER **Site ID:** ST007
Relative Risk: NR



ST008

Site Name:	Four Fuel Sites
Current site phase status:	RI
Relative Risk:	High
Prior year funding (FY03):	$98,992
Current funding (FY04):	Displayed only for internal release
Future funding (FY05-Finish):	$190,000

Site description:

The Four Fuel Sites consists of four underground storage tanks (USTs). Three of these USTs were located around Building 201, while the other is located at Building 214. The dates of these tanks are unknown, but all have not been used since the early 1980's. The tanks were used to store solvents and fuels.

Site surface area is covered with different materials varying from grass to cement. Subsurface consists of clay, clayey sands, sandstone and sand. A silt zone confines the upper aquifer from the lower aquifers.

Potential for human exposure to water contamination by the site exists because Tinker AFB and the surrounding communities of Midwest City and Del City derive their water supplies from the Garber-Wellington Aquifer (Class II-A) and surface water sources. One UST is fenced in while the others are located in areas where workers have access. Storm drains exist in the area of contamination.

Contaminants of concern:

Media	Contaminant	Sample Result	Units
Ground water	Chlorobenzene	500	ug/L
Ground water	Trichloroethylene (TCE)	2000	ug/L
Ground water	Vinyl Chloride	580	ug/L

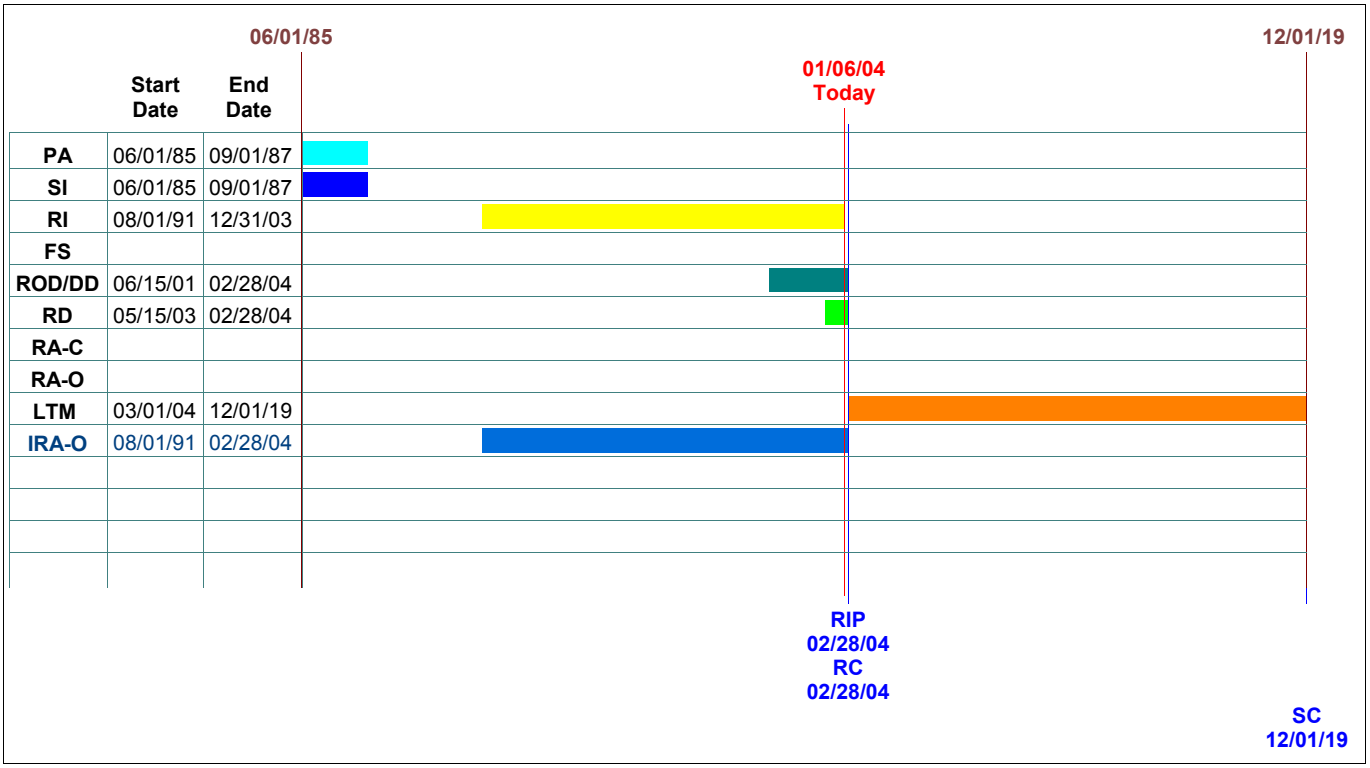
Remedy Type:

Remedy Type	Phase	Start Date	End Date
Long-term monitoring	IRA-O	08/01/91	02/28/04

Site Phase Schedule

MAJCOM: AFMC **Installation:** TINKER **Site ID:** ST008

Relative Risk: High



OT009

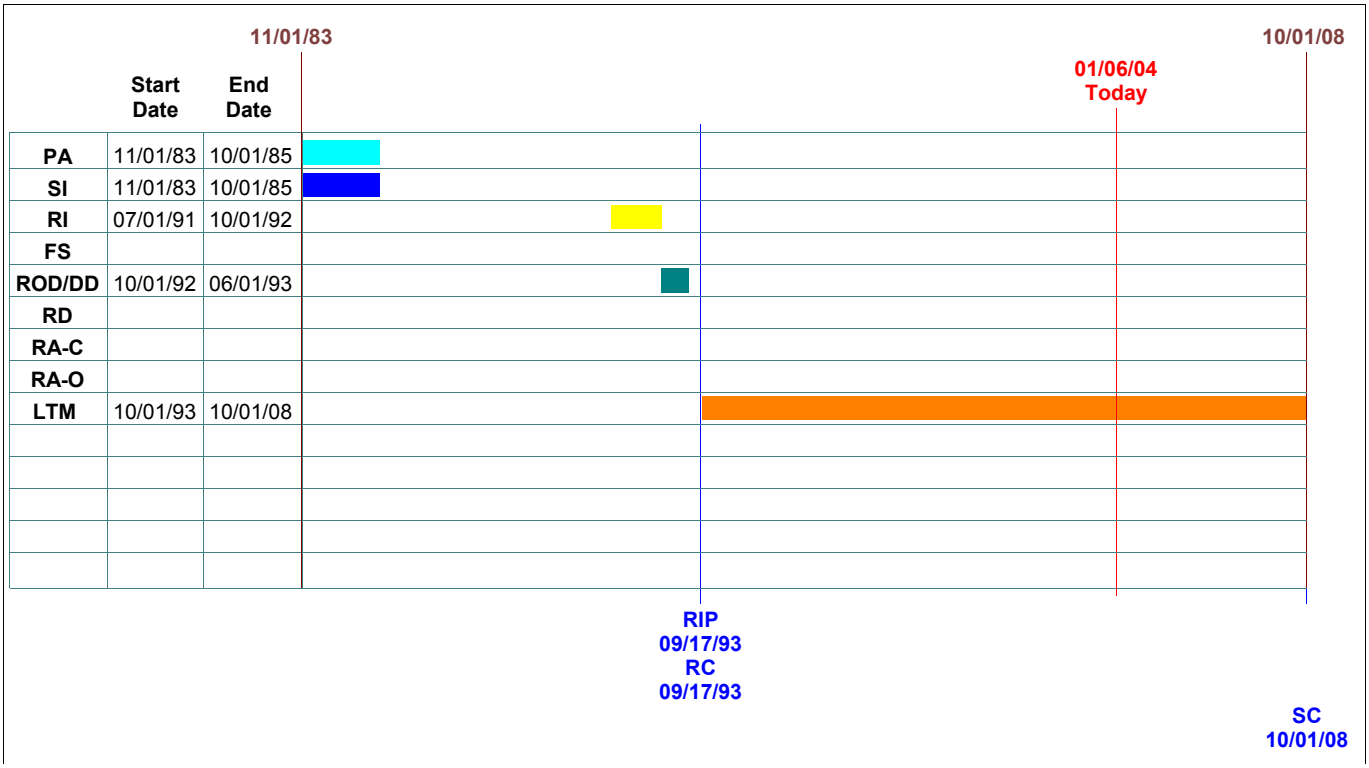
Site Name: Crutcho Creek
Current site phase status: LTM
Relative Risk: NR
Prior year funding (FY03): $127,957
Current funding (FY04): Displayed only for internal release
Future funding (FY05-Finish): $301,000

Site description:

This site has final remedy in place.

Site Phase Schedule

MAJCOM: AFMC **Installation:** TINKER **Site ID:** OT009
Relative Risk: NR



	Start Date	End Date
PA	11/01/83	10/01/85
SI	11/01/83	10/01/85
RI	07/01/91	10/01/92
FS		
ROD/DD	10/01/92	06/01/93
RD		
RA-C		
RA-O		
LTM	10/01/93	10/01/08

OT010

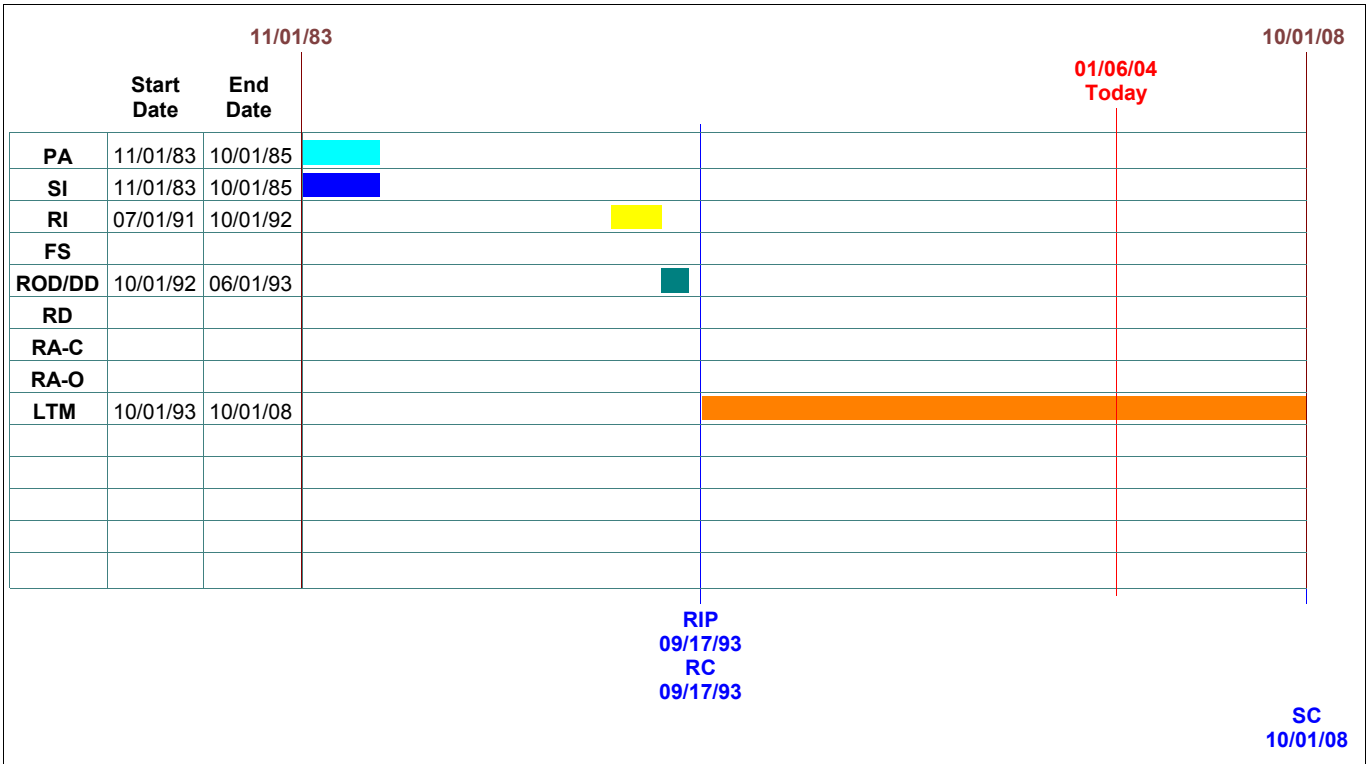
Site Name: Kuhlman and Elm Creeks
Current site phase status: LTM
Relative Risk: NR
Prior year funding (FY03): $96,937
Current funding (FY04): Displayed only for internal release
Future funding (FY05-Finish): $227,000

Site description:

This site has final remedy in place.

Site Phase Schedule

MAJCOM: AFMC **Installation:** TINKER **Site ID:** OT010
Relative Risk: NR



	Start Date	End Date
PA	11/01/83	10/01/85
SI	11/01/83	10/01/85
RI	07/01/91	10/01/92
FS		
ROD/DD	10/01/92	06/01/93
RD		
RA-C		
RA-O		
LTM	10/01/93	10/01/08

LF011

Site Name: Landfill 1
Current site phase status: LTM
Relative Risk: NR
Prior year funding (FY03): $2,755
Current funding (FY04): Displayed only for internal release
Future funding (FY05-Finish): $7,000

Site description:

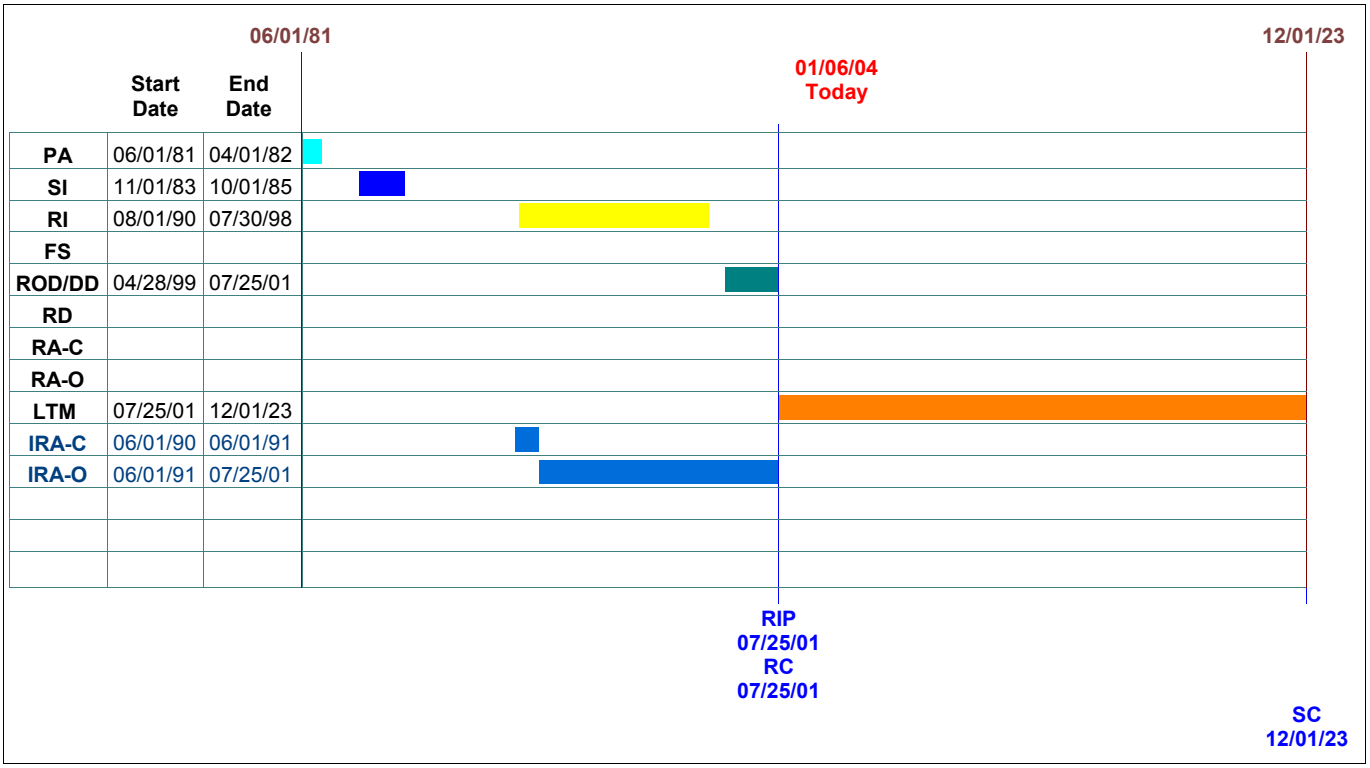
Landfill 1 occupies an area of approximately 1.5 acres and was used for disposal of general refuse from the Base. The landfill was in operation from 1942 to 1945, and disposal records are not available. Landfill 1 was capped in 1991 with a landfill cap designed and constructed in accordance with EPA technical guidelines.

Remedy Type:

Remedy Type	Phase	Start Date	End Date
Capping	IRA-C	06/01/90	06/01/91
Long-term monitoring	IRA-O	06/01/91	07/25/01

Site Phase Schedule

MAJCOM: AFMC **Installation:** TINKER **Site ID:** LF011
Relative Risk: NR



LF012

Site Name:	Landfill 2
Current site phase status:	LTM
Relative Risk:	NR
Prior year funding (FY03):	$24,794
Current funding (FY04):	Displayed only for internal release
Future funding (FY05-Finish):	$58,000

Site description:

Landfill 2 covers an area of approximately 27.5 acres and was used for disposal of general refuse from the Base. The landfill was in operation from 1945 to 1952, and disposal records are not available. It is believed that one specific use dump composed primarily of industrial solvents and petroleum products was located in the northeast corner of the landfill. The inactive Radiological Waste Disposal Site (RWDS) 1030W is located in the central portion of Landfill 2 and was reported to be a burial site for burned radium dial waste.

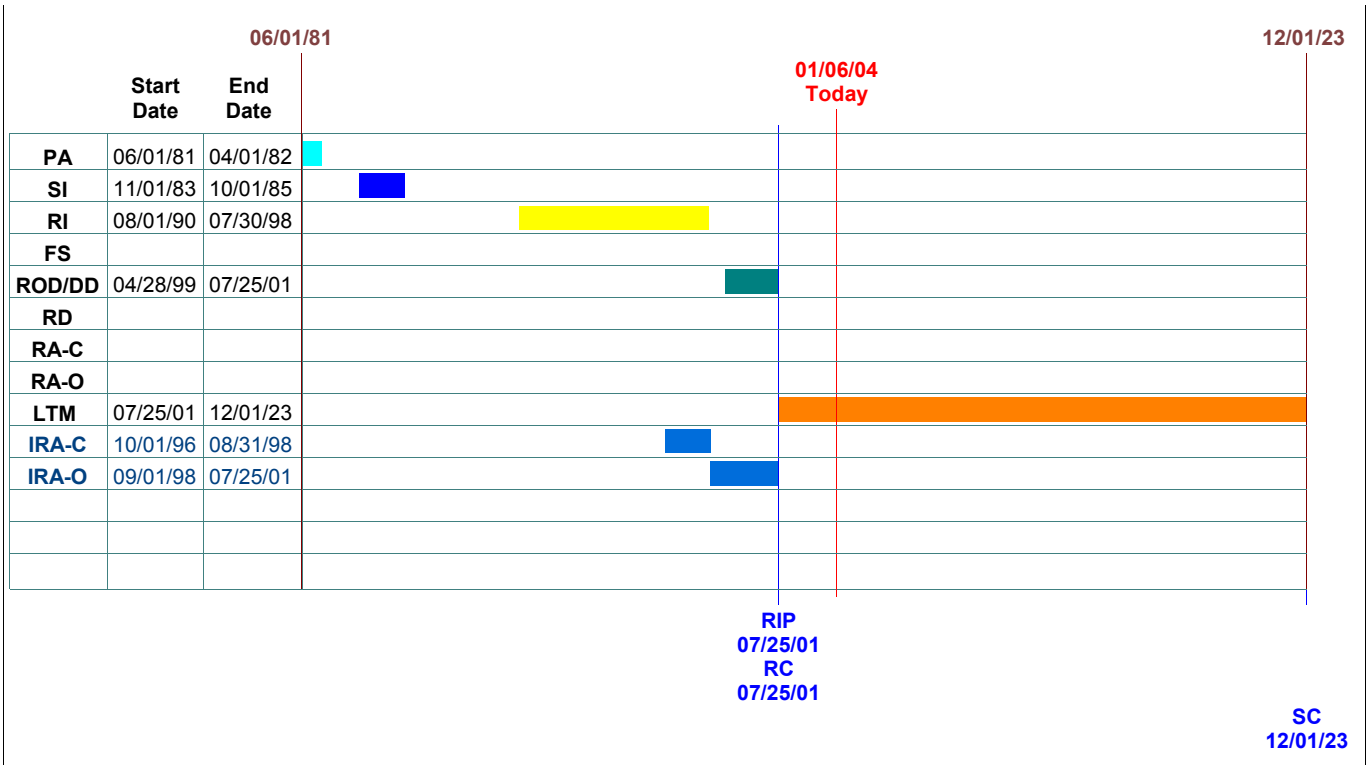
Remedy Type:

Remedy Type	Phase	Start Date	End Date
Capping	IRA-C	10/01/96	08/31/98
Long-term monitoring	IRA-O	09/01/98	07/25/01

Site Phase Schedule

MAJCOM: AFMC **Installation:** TINKER **Site ID:** LF012

Relative Risk: NR



LF013

Site Name: Landfill 3
Current site phase status: LTM
Relative Risk: NR
Prior year funding (FY03): $8,265
Current funding (FY04): Displayed only for internal release
Future funding (FY05-Finish): $32,000

Site description:

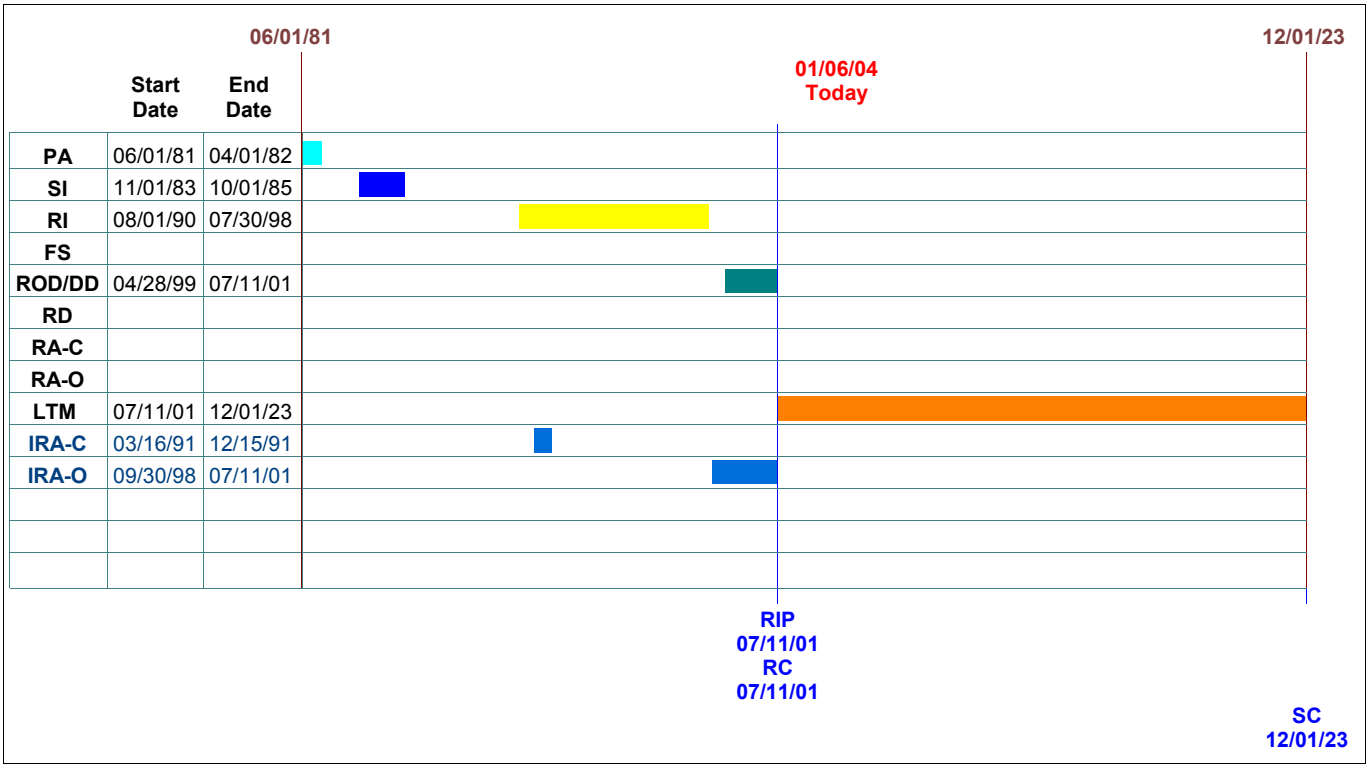
Landfill 3 occupies an area of approximately 8.25 acres and was used for disposal of general refuse from the Base. The landfill was in operation from 1952 to 1961, and disposal records are not available. It is believed that two specific use dump areas were located within the landfill: an area containing lead contaminated soils, and a sludge dump containing waste oils and sludges from the Petroleum Oil Lubricant Facility.
Landfill 3 was capped in 1991 with a landfill cap designed and constructed in accordance with EPA technical guidelines.

Remedy Type:

Remedy Type	Phase	Start Date	End Date
Capping	IRA-C	03/16/91	12/15/91
Long-term monitoring	IRA-O	09/30/98	07/11/01

Site Phase Schedule

MAJCOM: AFMC **Installation:** TINKER **Site ID:** LF013
Relative Risk: NR



LF014

Site Name: Landfill 4
Current site phase status: LTM
Relative Risk: NR
Prior year funding (FY03): $11,020
Current funding (FY04): Displayed only for internal release
Future funding (FY05-Finish): $44,000

Site description:

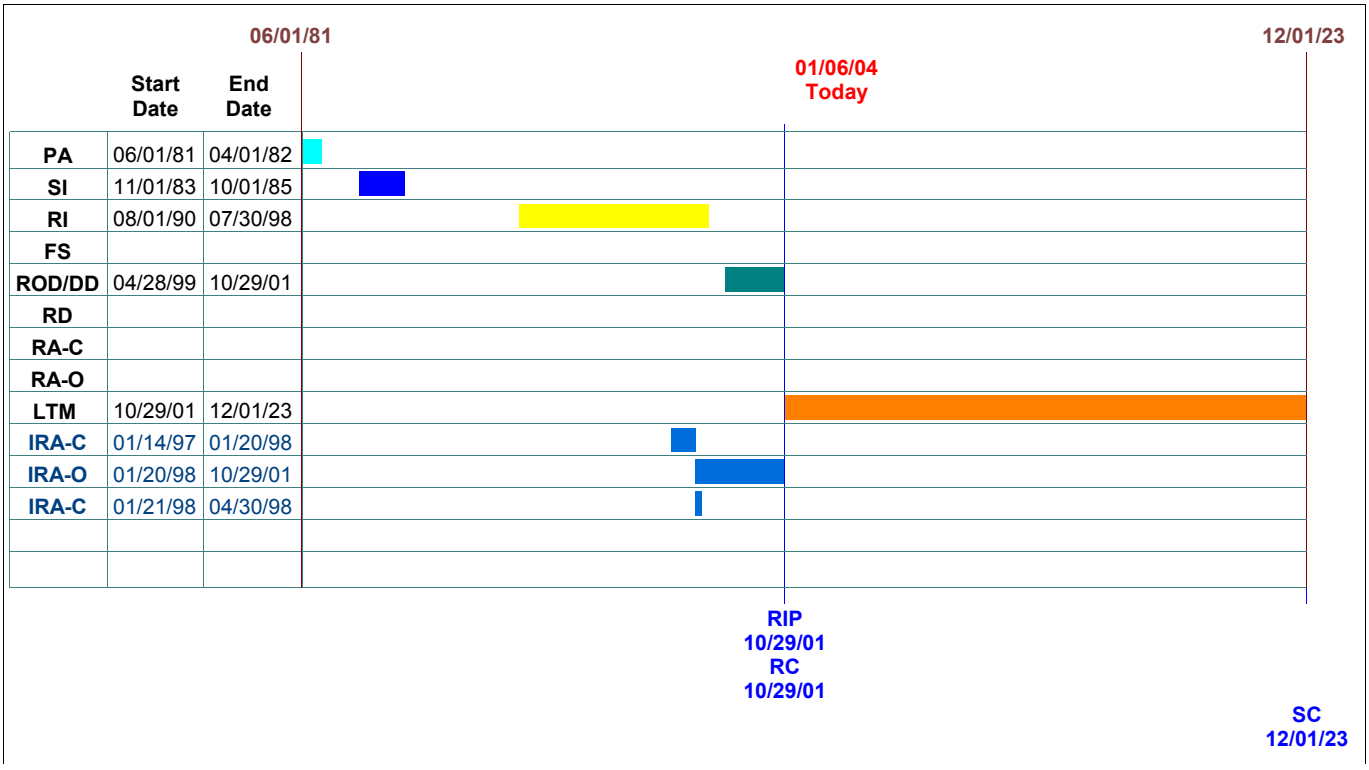
Landfill 4 covers an area of approximately 12.4 acres and was used for disposal of general refuse from the Base. The landfill was in operation from 1962 to 1968, and disposal records are not available. It is believed that one specific-use dump used for landfarming sludges collected from the bottom of petroleum and solvent storage tanks was located in the central portion of the landfill.

Remedy Type:

Remedy Type	Phase	Start Date	End Date
Drainage controls	IRA-C	01/14/97	01/20/98
Long-term monitoring	IRA-O	01/20/98	10/29/01
Capping	IRA-C	01/21/98	04/30/98

Site Phase Schedule

MAJCOM: AFMC **Installation:** TINKER **Site ID:** LF014
Relative Risk: NR



LF015

Site Name:	Landfill 5
Current site phase status:	LTM
Relative Risk:	NR
Prior year funding (FY03):	$13,775
Current funding (FY04):	Displayed only for internal release
Future funding (FY05-Finish):	$23,000

Site description:

Landfill 5 is located in the south portion of Tinker AFB and is bounded by Tower Road on the west, Taxiway E to the south, and Crutcho Creek to the north and east. Landfill 5 is triangular in shape and encompasses an estimated six acres. The landfill consists of trenches that run from northwest to southeast. The trenches are estimated to be 400 feet long, 50 feet wide, and 16 feet deep. A compacted clay and topsoil cover was constructed over the trenched area in August 1990 to minimize infiltration of precipitation.

Landfill 5 was in operation from 1968 to 1970. During its operational period the landfill received approximately 75,000 cubic yards of waste. Waste disposed of in the landfill consisted of general refuse with small quantities of industrial waste.

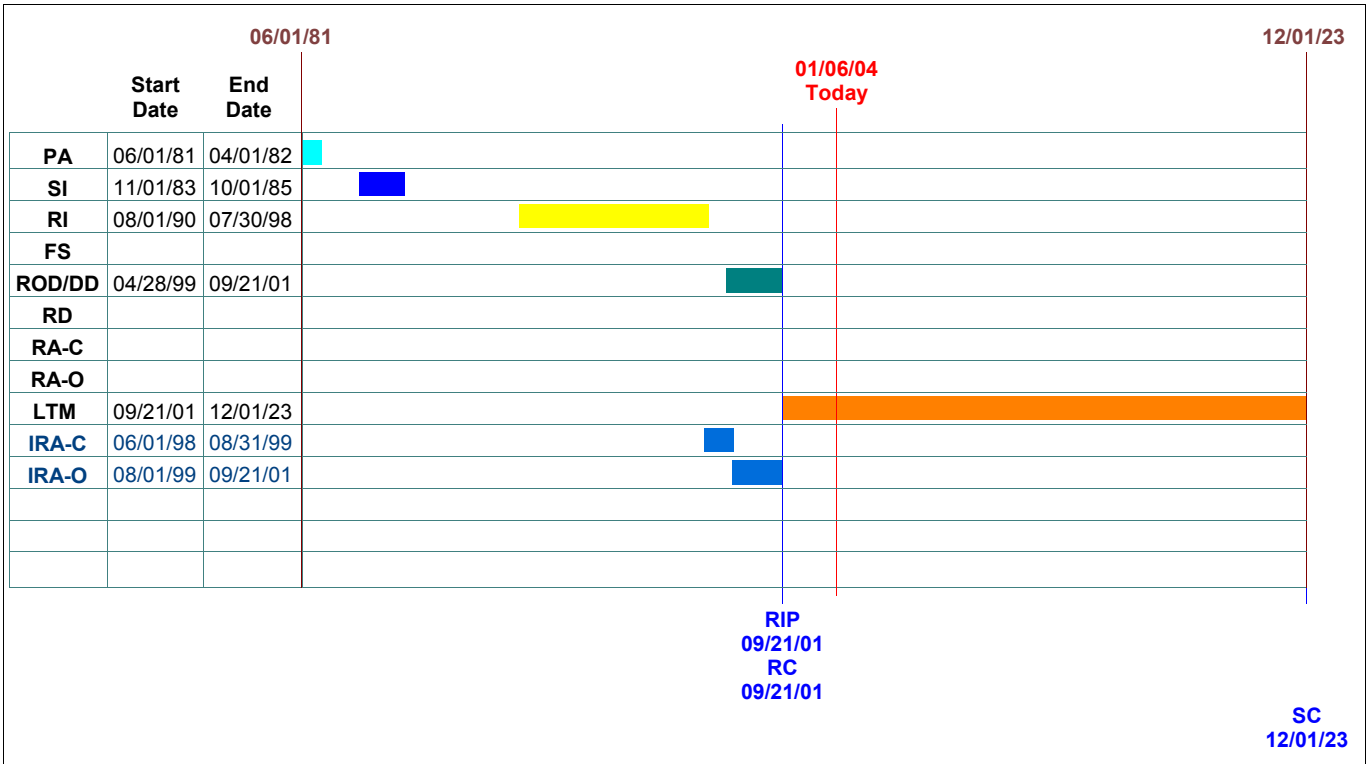
Remedy Type:

Remedy Type	Phase	Start Date	End Date
Capping	IRA-C	06/01/98	08/31/99
Long-term monitoring	IRA-O	08/01/99	09/21/01

Site Phase Schedule

MAJCOM: AFMC **Installation:** TINKER **Site ID:** LF015

Relative Risk: NR



LF016

Site Name:	Landfill 6
Current site phase status:	LTM
Relative Risk:	NR
Prior year funding (FY03):	$214,883
Current funding (FY04):	Displayed only for internal release
Future funding (FY05-Finish):	$396,000

Site description:

Landfill 6 is located in the western portion of Area "D" approximately 0.5 miles south-east of Tinker AFB along Southeast 59th Street. Area D was developed on land leased from Oklahoma City. The landfill operated from 1970 to 1979 and was used to dispose of general refuse from Tinker AFB. Refuse was deposited into a number of parallel trenches within the landfill at depths of up to 30 feet and covered daily. Cover material consisted of either sand, clay, or a sand/clay mixture. Although 40 acres were available at the site, only about 25 acres were occupied by the landfill trenches in the eastern half, adjacent to SE 59th Street. Upon closure in 1979 several feet of compacted soil was used to cover the trenches. Records indicate the site was used for the disposal of general refuse, industrial refuse, and sludges from industrial wastewater treatment plants. Approximately 500,000 cubic yards of material was disposed in the landfill during its operating years. An engineered clay cap has been constructed over the Landfill 6 trenches.

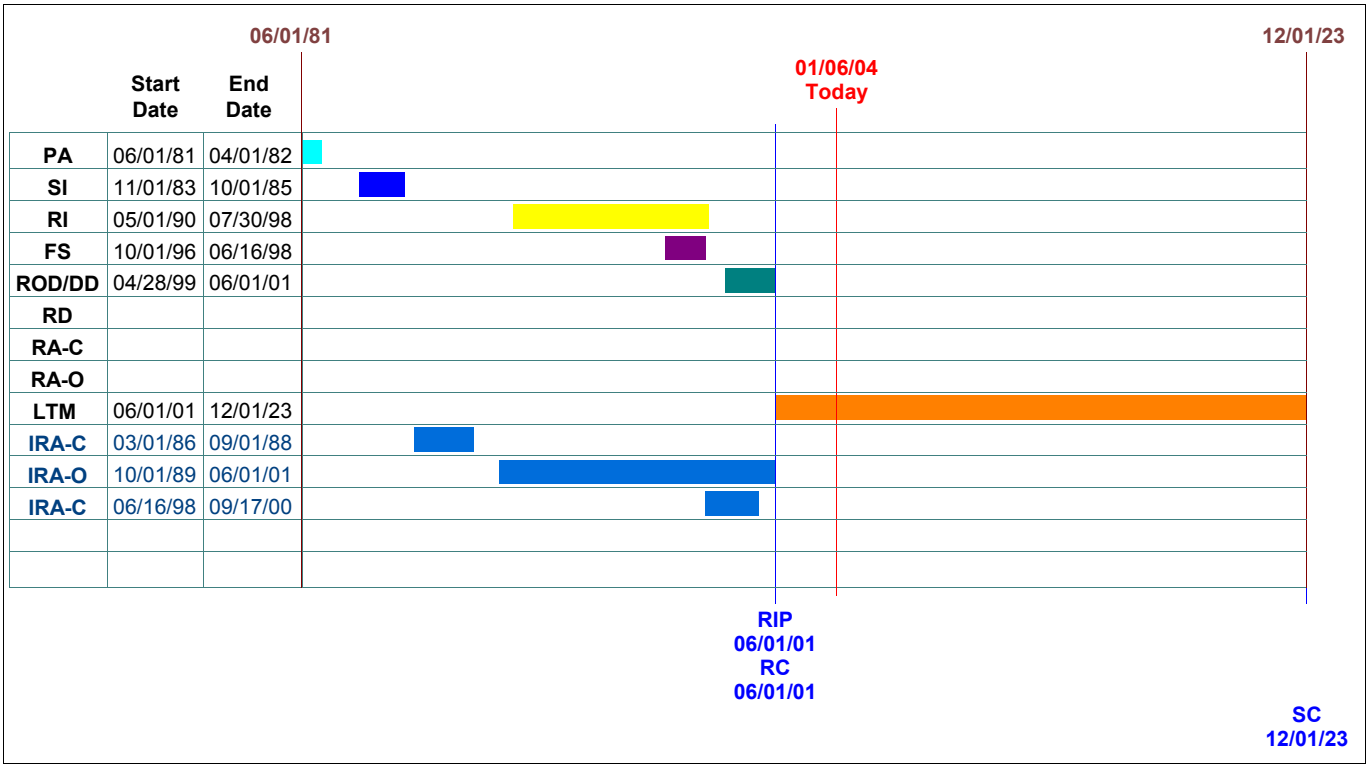
Remedy Type:

Remedy Type	Phase	Start Date	End Date
Capping	IRA-C	03/01/86	09/01/88
Long-term monitoring	IRA-O	10/01/89	06/01/01
Capping	IRA-C	06/16/98	09/17/00

Site Phase Schedule

MAJCOM: AFMC **Installation:** TINKER **Site ID:** LF016

Relative Risk: NR



WP017

Site Name: Supernatant Pond
Current site phase status: LTM
Relative Risk: NR
Prior year funding (FY03): $25,075
Current funding (FY04): Displayed only for internal release
Future funding (FY05-Finish): $0

Site description:

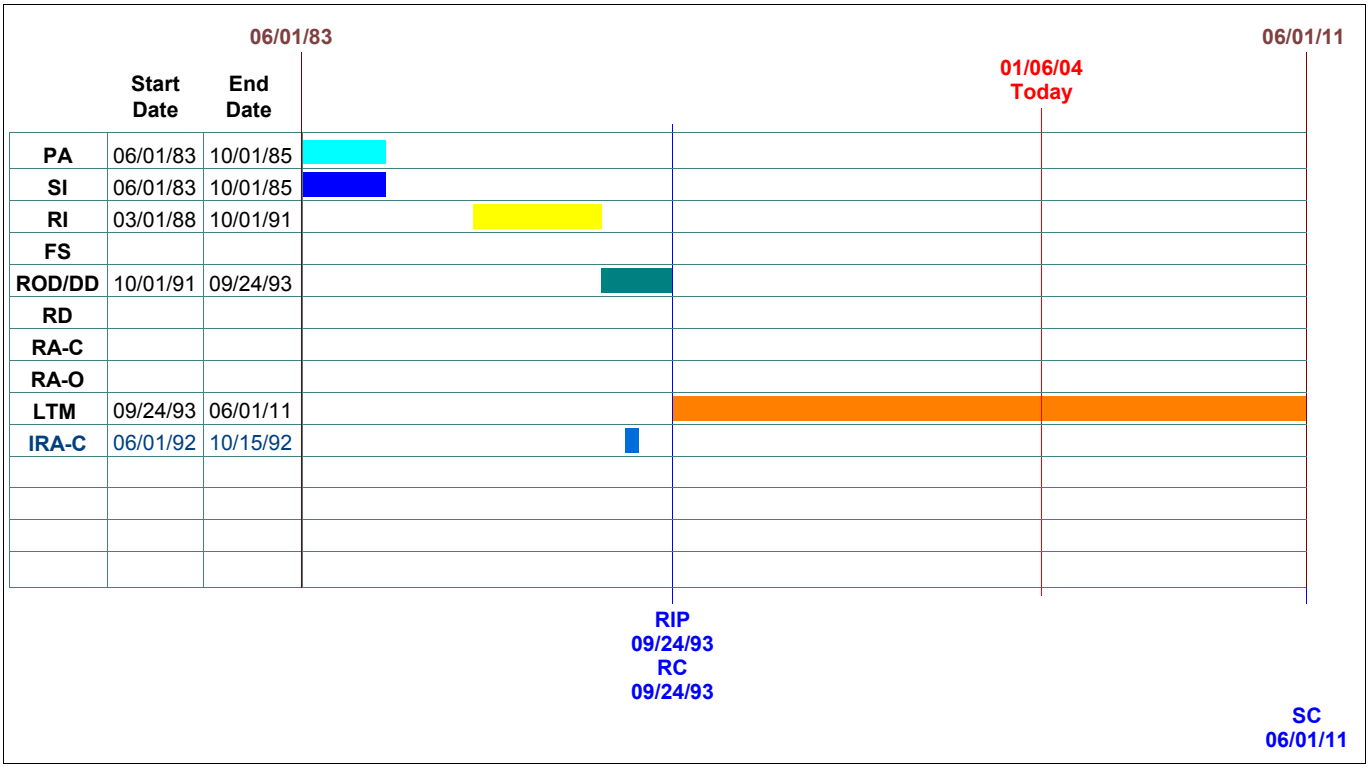
This site has final remedy in place.

Remedy Type:

Remedy Type	Phase	Start Date	End Date
Solidification/stabilization	IRA-C	06/01/92	10/15/92

Site Phase Schedule

MAJCOM: AFMC **Installation:** TINKER **Site ID:** WP017
Relative Risk: NR



WP018

Site Name: Industrial Waste Pit #1
Current site phase status: ROD/DD
Relative Risk: MED
Prior year funding (FY03): $0
Current funding (FY04): Displayed only for internal release
Future funding (FY05-Finish): $0

Site description:

Industrial Waste Pit 1 is located 500 yards southwest of Building 2121, approximately 400 yards west of Douglas Boulevard, and northwest of the intersection of Runway Drive and 59th Street. The area of the waste pit was approximately 1.4 acres. The site is an unlined pit in which waste oils, stripping solutions and plating wastes were disposed from 1947 to 1958. The pit was filled in 1958 and graded, leaving no visible surface features to indicate its location.

Migration of contaminants via air and surface runoff has not been fully delineated. The site does have vegetation growing on it.

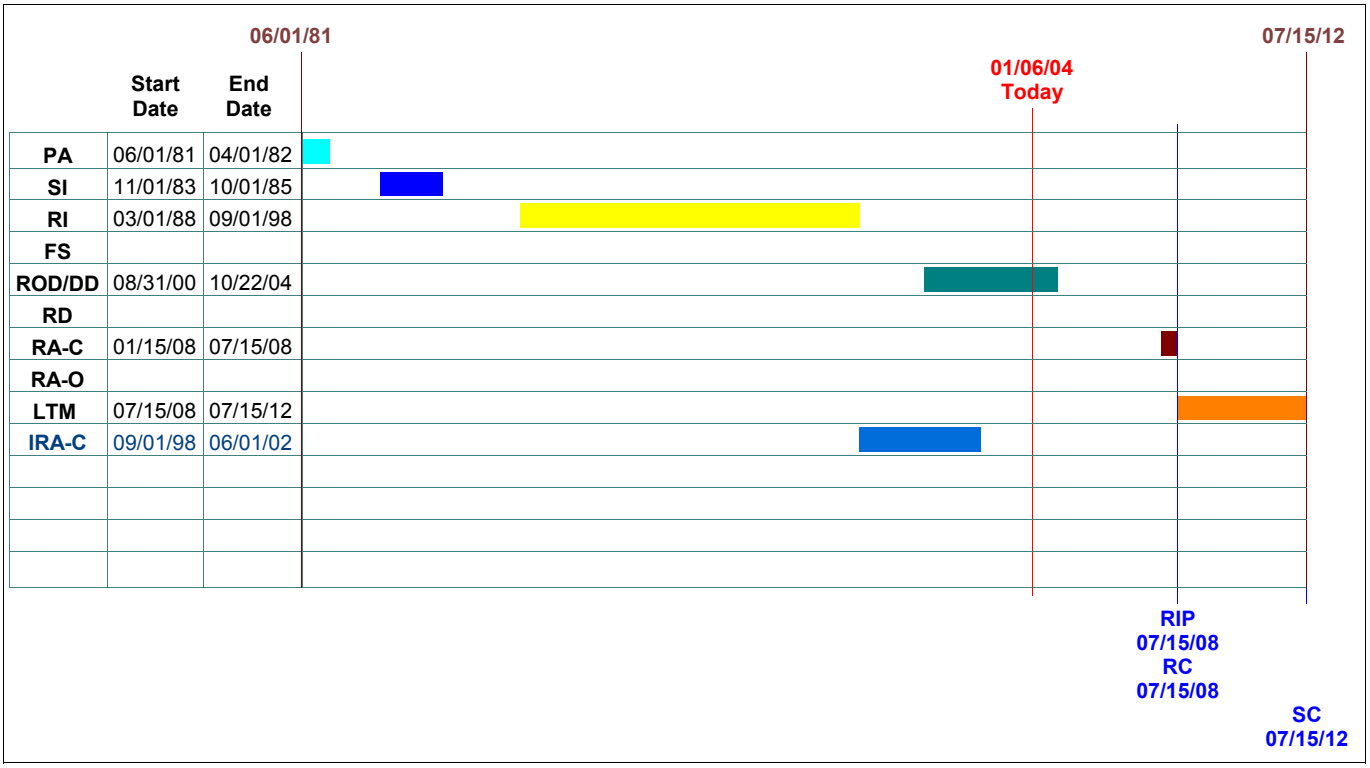
Potential for human exposure exists because the site is not fenced and may be accessed by base personnel.

Remedy Type:

Remedy Type	Phase	Start Date	End Date
Ex situ soil treatment	IRA-C	09/01/98	06/01/02
Ex situ soil treatment	RA-C	01/15/08	07/15/08

Site Phase Schedule

MAJCOM: AFMC **Installation:** TINKER **Site ID:** WP018
Relative Risk: MED



WP019

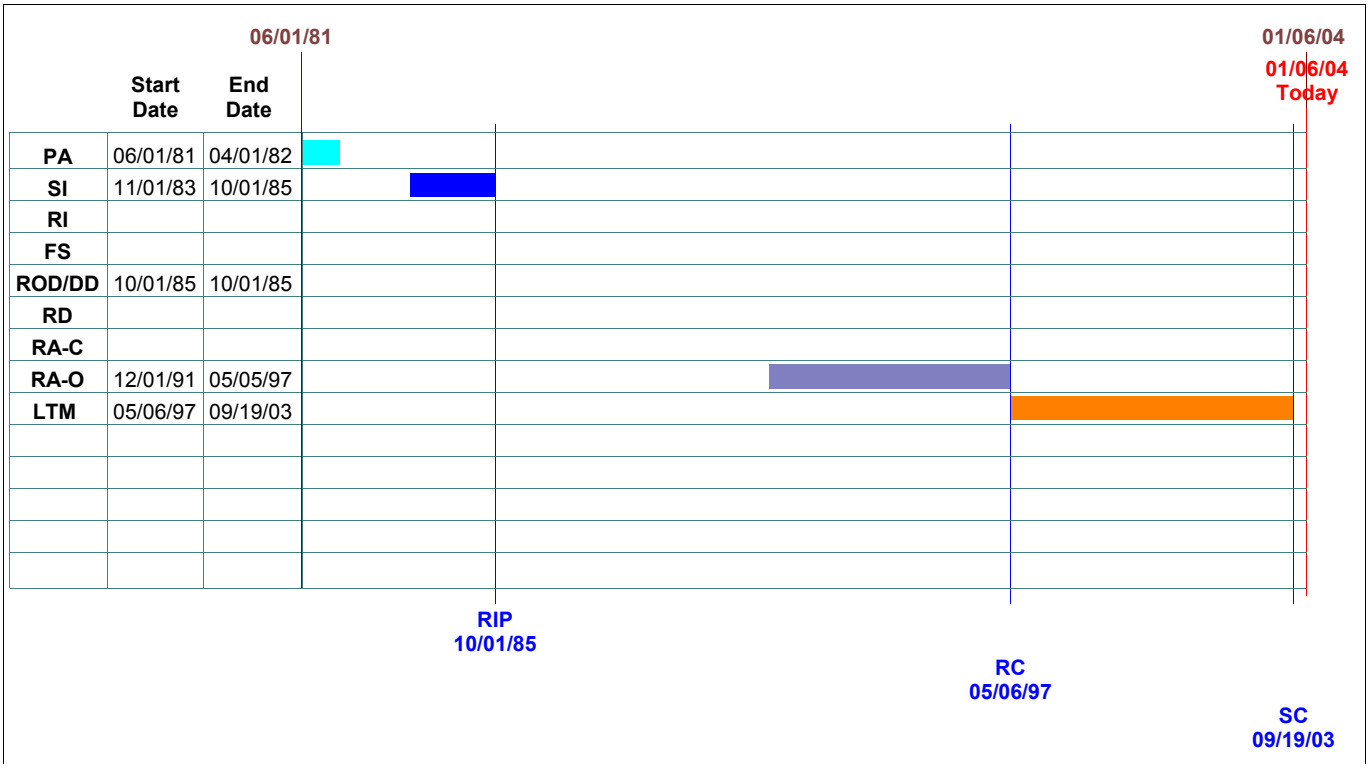
Site Name: Industrial Waste Pit #2
Current site phase status: NFRAP IV
Relative Risk: NR
Prior year funding (FY03): $14,104
Current funding (FY04): Displayed only for internal release
Future funding (FY05-Finish): $0

Site description:

This site has final remedy in place.

Site Phase Schedule

MAJCOM: AFMC **Installation:** TINKER **Site ID:** WP019
Relative Risk: NR



	Start Date	End Date
PA	06/01/81	04/01/82
SI	11/01/83	10/01/85
RI		
FS		
ROD/DD	10/01/85	10/01/85
RD		
RA-C		
RA-O	12/01/91	05/05/97
LTM	05/06/97	09/19/03

OT020

Site Name: Multiple Creeks
Current site phase status: NFRAP I
Relative Risk: NR
Prior year funding (FY03): $0
Current funding (FY04): Displayed only for internal release
Future funding (FY05-Finish): $0

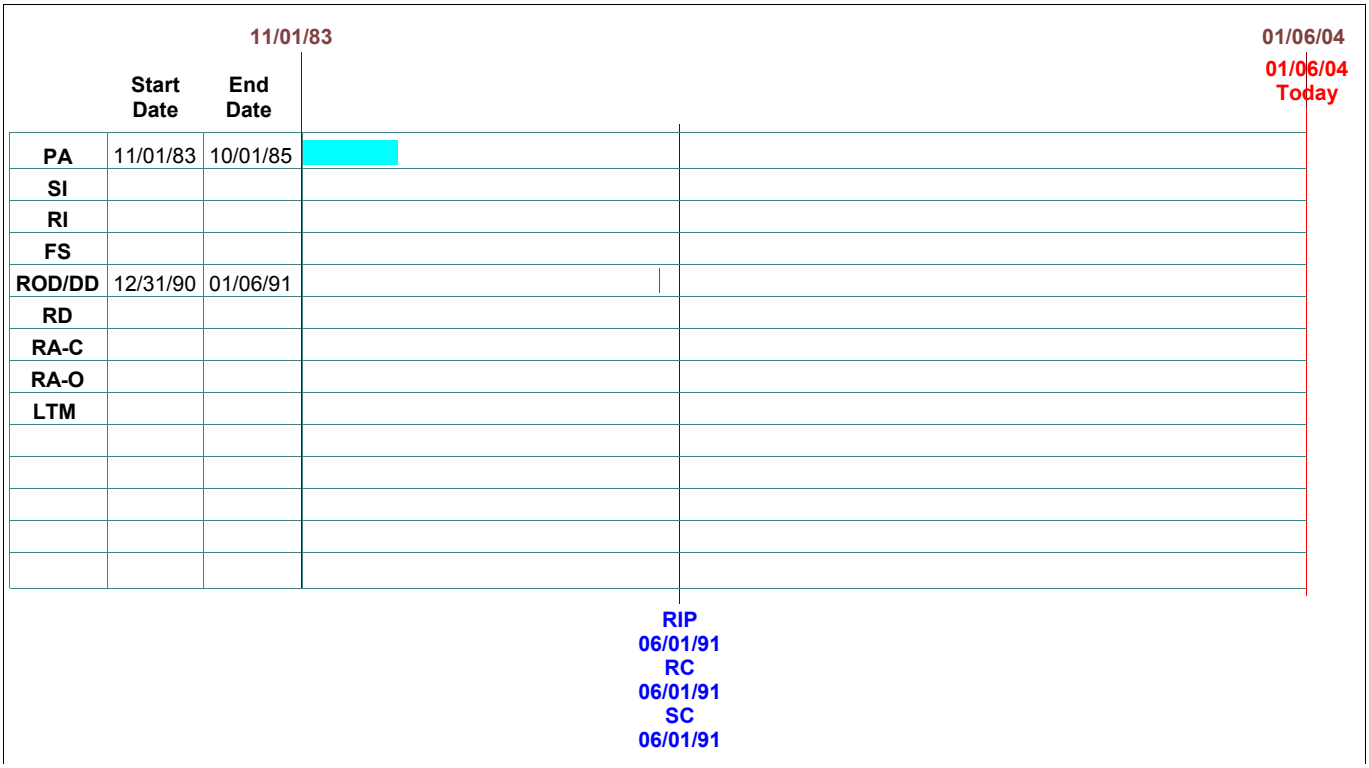
Site description:

This site has final remedy in place.

Site Phase Schedule

MAJCOM: AFMC **Installation:** TINKER **Site ID:** OT020

Relative Risk: NR



	Start Date	End Date
PA	11/01/83	10/01/85
SI		
RI		
FS		
ROD/DD	12/31/90	01/06/91
RD		
RA-C		
RA-O		
LTM		

FT021

Site Name: Fire Training Area #1
Current site phase status: NFRAP IV
Relative Risk: NR
Prior year funding (FY03): $0
Current funding (FY04): Displayed only for internal release
Future funding (FY05-Finish): $0

Site description:

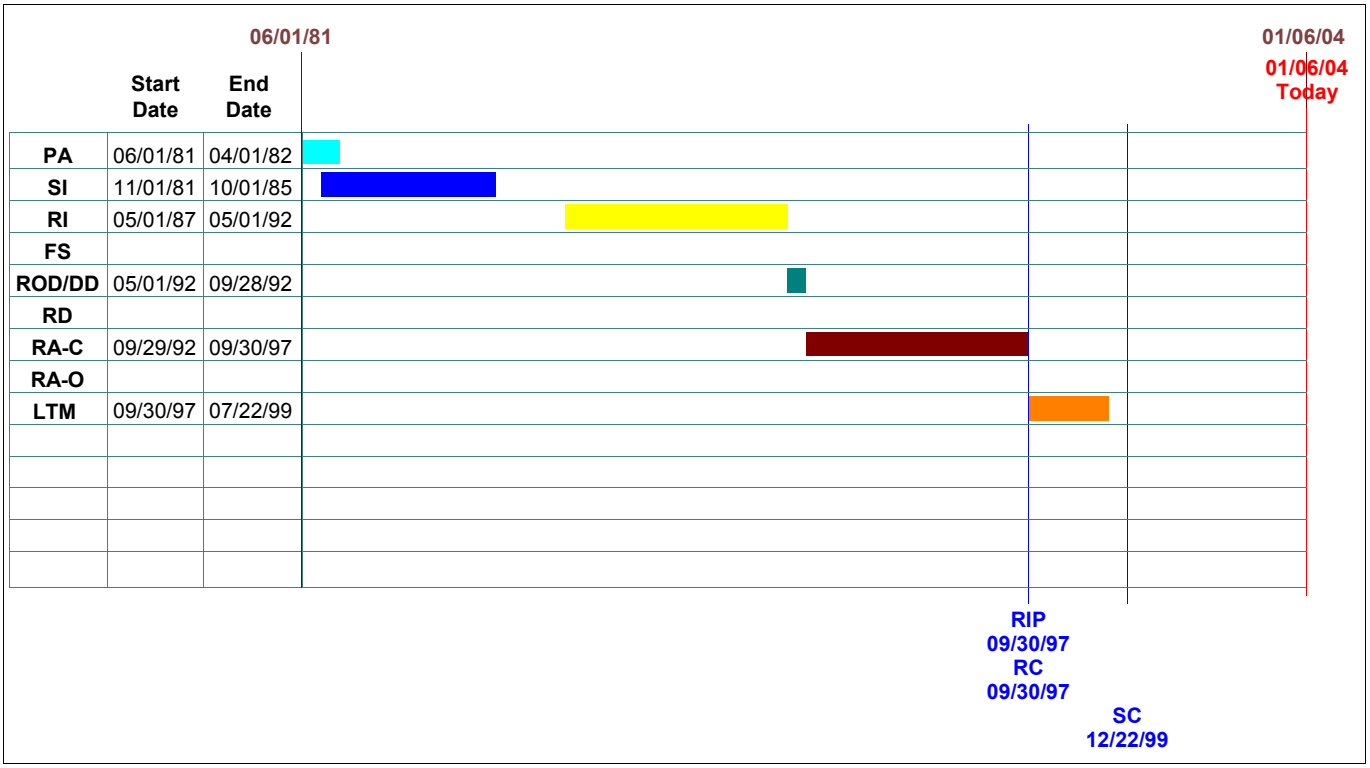
This site has final remedy in place.

Remedy Type:

Remedy Type	Phase	Start Date	End Date
Long-term monitoring	RA-C	09/29/92	09/30/97

Site Phase Schedule

MAJCOM: AFMC **Installation:** TINKER **Site ID:** FT021
Relative Risk: NR



FT022

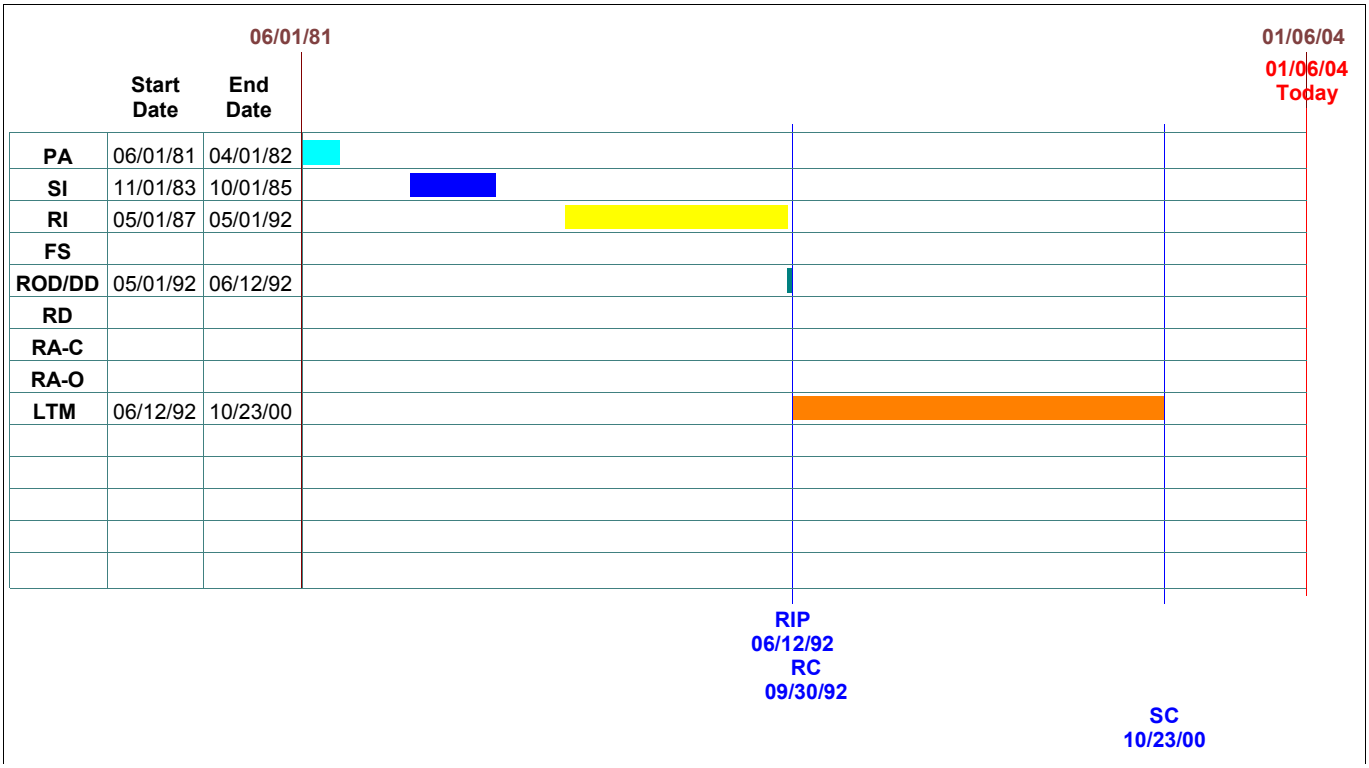
Site Name: Fire Training Area #2
Current site phase status: NFRAP IV
Relative Risk: NR
Prior year funding (FY03): $0
Current funding (FY04): Displayed only for internal release
Future funding (FY05-Finish): $0

Site description:

This site has final remedy in place.

Site Phase Schedule

MAJCOM: AFMC **Installation:** TINKER **Site ID:** FT022
Relative Risk: NR



	Start Date	End Date
PA	06/01/81	04/01/82
SI	11/01/83	10/01/85
RI	05/01/87	05/01/92
FS		
ROD/DD	05/01/92	06/12/92
RD		
RA-C		
RA-O		
LTM	06/12/92	10/23/00

OT023

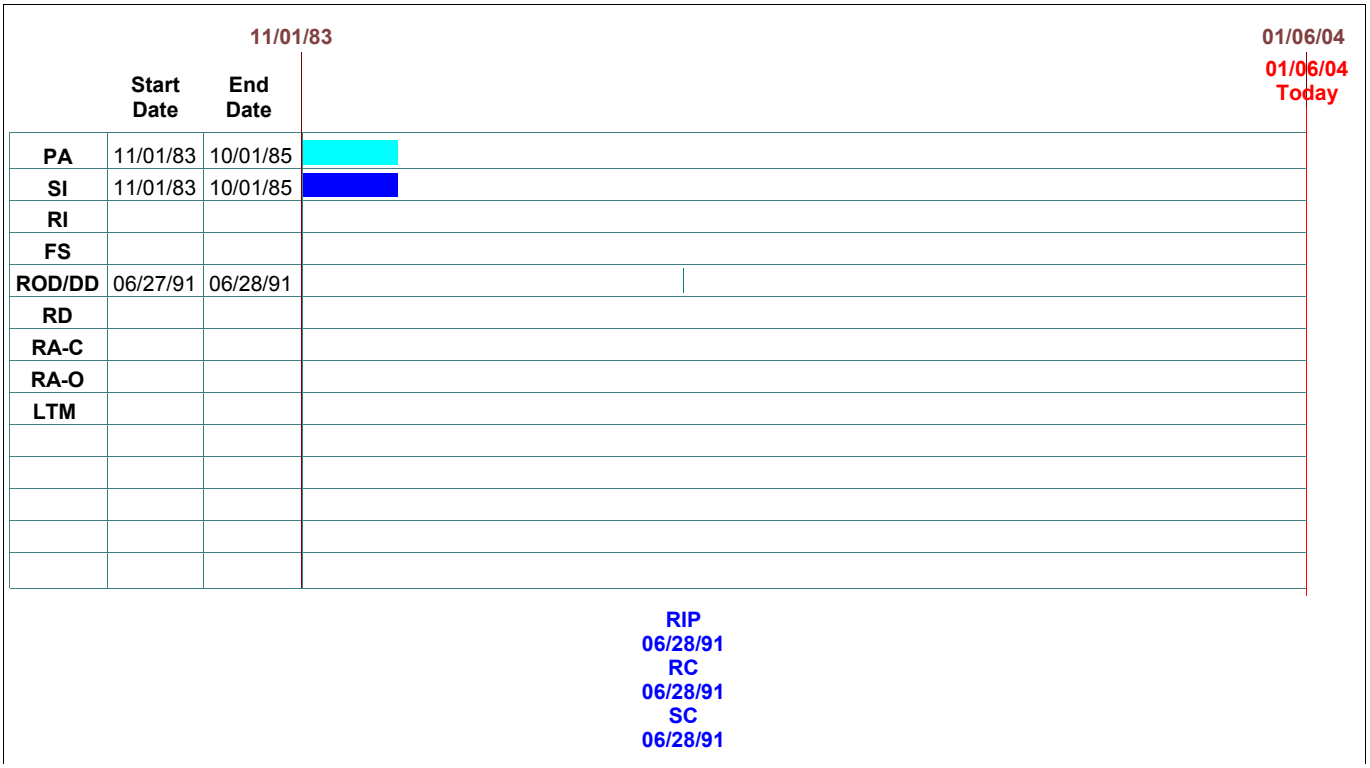
Site Name: Facility 1123
Current site phase status: NFRAP II
Relative Risk: NR
Prior year funding (FY03): $0
Current funding (FY04): Displayed only for internal release
Future funding (FY05-Finish): $0

Site description:

This site has final remedy in place.

Site Phase Schedule

MAJCOM: AFMC **Installation:** TINKER **Site ID:** OT023
Relative Risk: NR



	Start Date	End Date
PA	11/01/83	10/01/85
SI	11/01/83	10/01/85
RI		
FS		
ROD/DD	06/27/91	06/28/91
RD		
RA-C		
RA-O		
LTM		

FT024

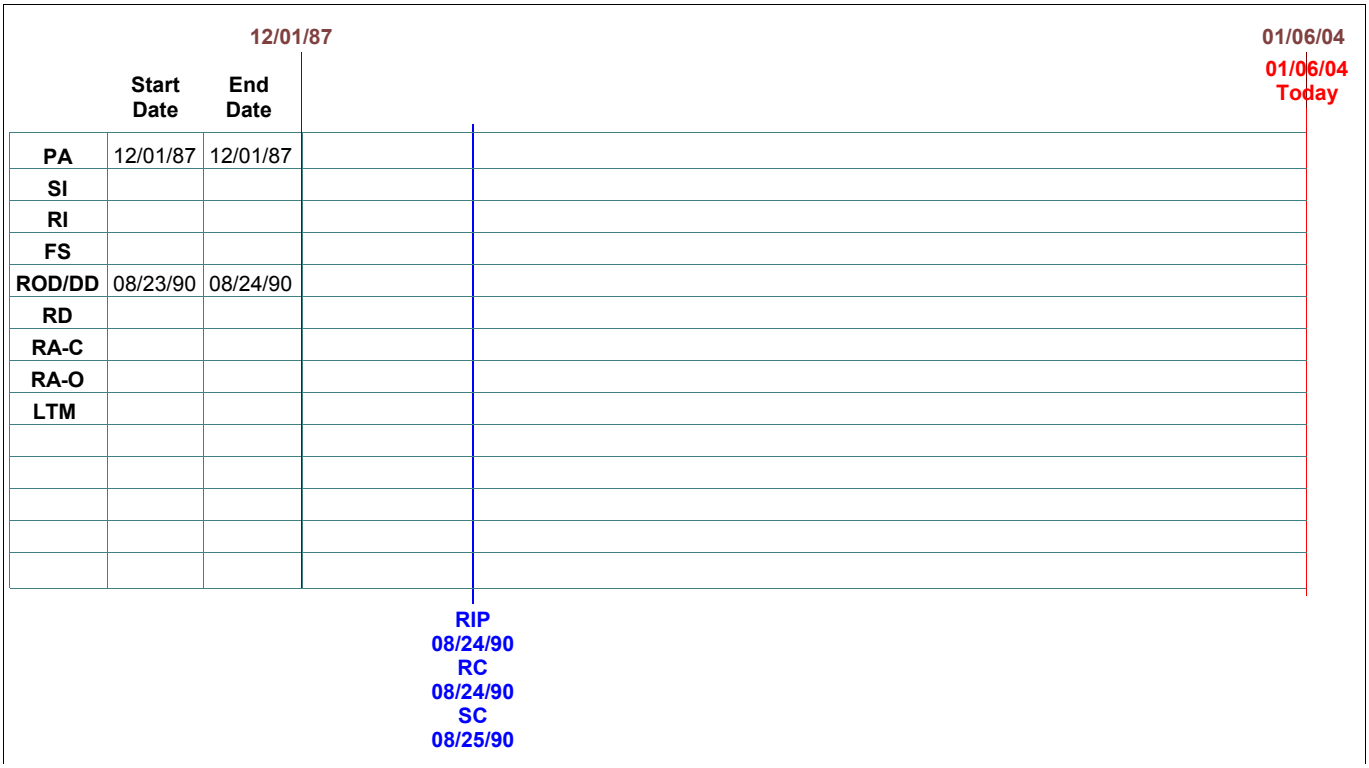
Site Name: Fire Training Area #4
Current site phase status: NFRAP I
Relative Risk: NR
Prior year funding (FY03): $0
Current funding (FY04): Displayed only for internal release
Future funding (FY05-Finish): $0

Site description:

This site has final remedy in place.

Site Phase Schedule

MAJCOM: AFMC **Installation:** TINKER **Site ID:** FT024
Relative Risk: NR



	Start Date	End Date
PA	12/01/87	12/01/87
SI		
RI		
FS		
ROD/DD	08/23/90	08/24/90
RD		
RA-C		
RA-O		
LTM		

RW025

Site Name: Radioactive Waste Disposal Site 1030 West
Current site phase status: NFRAP III
Relative Risk: NR
Prior year funding (FY03): $0
Current funding (FY04): Displayed only for internal release
Future funding (FY05-Finish): $0

Site description:

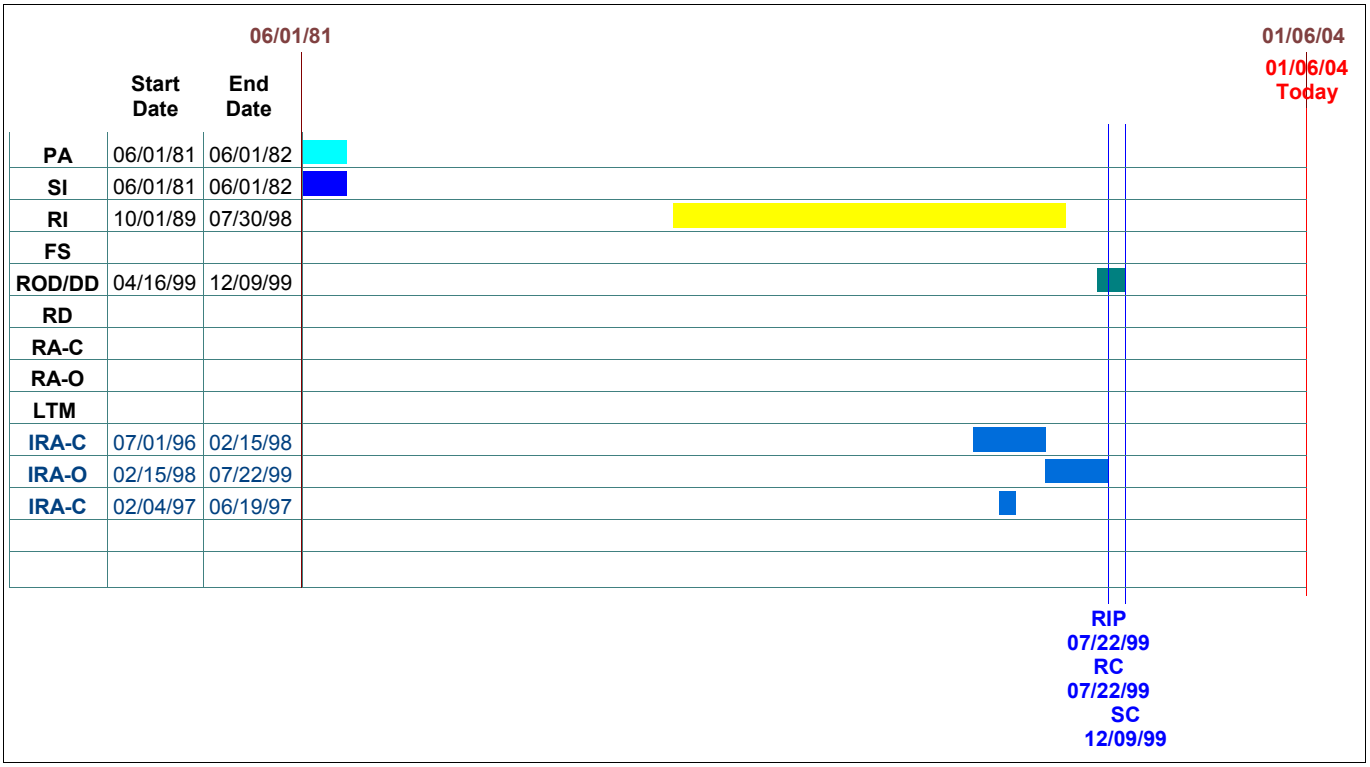
RWDS 1030W is located on Landfill 2 (SWMU-4) approximately 1,700 feet west and 550 feet north of Building 1030. RWDS 1030W is located in a depression and is mainly covered with vegetation. A small stream, which formerly ran across the site, has been rerouted to the west. Between 1951 and the early 1960's, radium paint solids were disposed of at this site. In April - June 1997 approximately 2150 cubic yards of contaminated soils were removed. The site was surveyed to ensure no residual radium 226 remained above the cleanup criteria of 12 pCi/g.

Remedy Type:

Remedy Type	Phase	Start Date	End Date
Removal	IRA-C	07/01/96	02/15/98
Waste removal - soils	IRA-C	02/04/97	06/19/97
Long-term monitoring	IRA-O	02/15/98	07/22/99

Site Phase Schedule

MAJCOM: AFMC **Installation:** TINKER **Site ID:** RW025
Relative Risk: NR



RW026

Site Name: Radioactive Waste Disposal Site 201 South
Current site phase status: NFRAP III
Relative Risk: NR
Prior year funding (FY03): $0
Current funding (FY04): Displayed only for internal release
Future funding (FY05-Finish): $0

Site description:

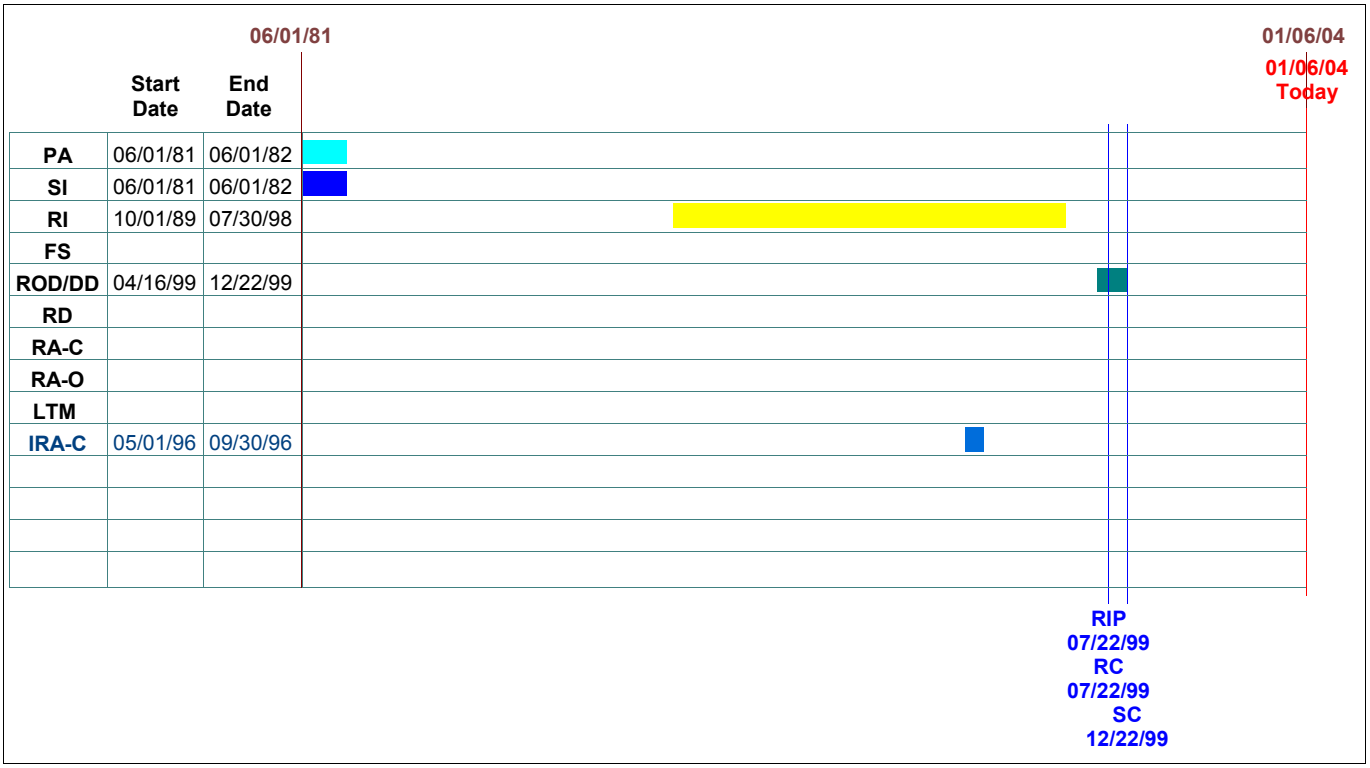
50 ft by 80 ft Radioactive Waste Disposal Site - This site is located in the southern alcove of Building 201. This site was reported to contain radium paint solids and dials from the radium paint room previously located in Building 201. Material was probably placed at the site in the late 1950's. All contaminated soil was removed and disposed of in February/March 1996.

Remedy Type:

Remedy Type	Phase	Start Date	End Date
Waste removal - soils	IRA-C	05/01/96	09/30/96

Site Phase Schedule

MAJCOM: AFMC **Installation:** TINKER **Site ID:** RW026
Relative Risk: NR



RW027

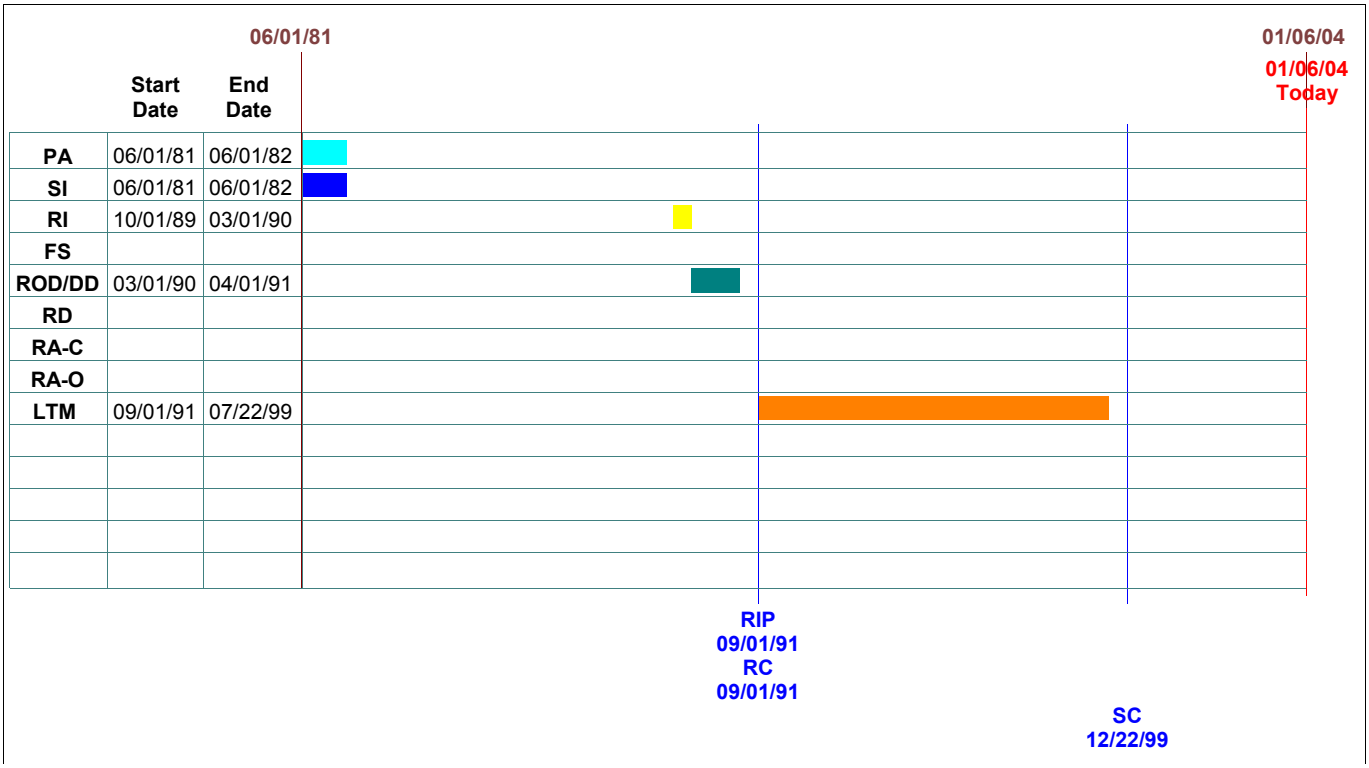
Site Name: Radioactive Waste Disposal Site 62598
Current site phase status: NFRAP IV
Relative Risk: NR
Prior year funding (FY03): $0
Current funding (FY04): Displayed only for internal release
Future funding (FY05-Finish): $0

Site description:

This site has final remedy in place.

Site Phase Schedule

MAJCOM: AFMC **Installation:** TINKER **Site ID:** RW027
Relative Risk: NR



	Start Date	End Date
PA	06/01/81	06/01/82
SI	06/01/81	06/01/82
RI	10/01/89	03/01/90
FS		
ROD/DD	03/01/90	04/01/91
RD		
RA-C		
RA-O		
LTM	09/01/91	07/22/99

RW028

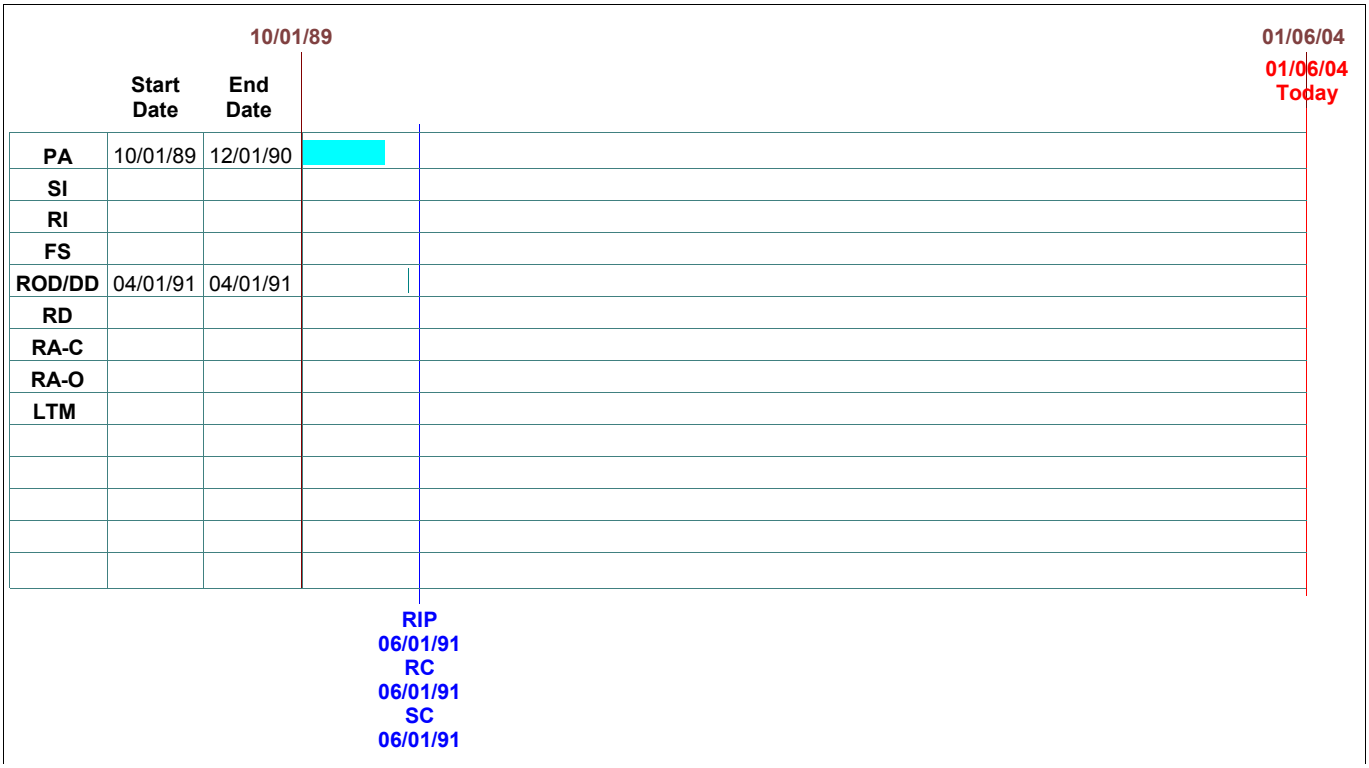
Site Name: Radioactive Waste Disposal Site 4000
Current site phase status: NFRAP I
Relative Risk: NR
Prior year funding (FY03): $0
Current funding (FY04): Displayed only for internal release
Future funding (FY05-Finish): $0

Site description:

This site has final remedy in place.

Site Phase Schedule

MAJCOM: AFMC **Installation:** TINKER **Site ID:** RW028
Relative Risk: NR



	Start Date	End Date
PA	10/01/89	12/01/90
SI		
RI		
FS		
ROD/DD	04/01/91	04/01/91
RD		
RA-C		
RA-O		
LTM		

RW029

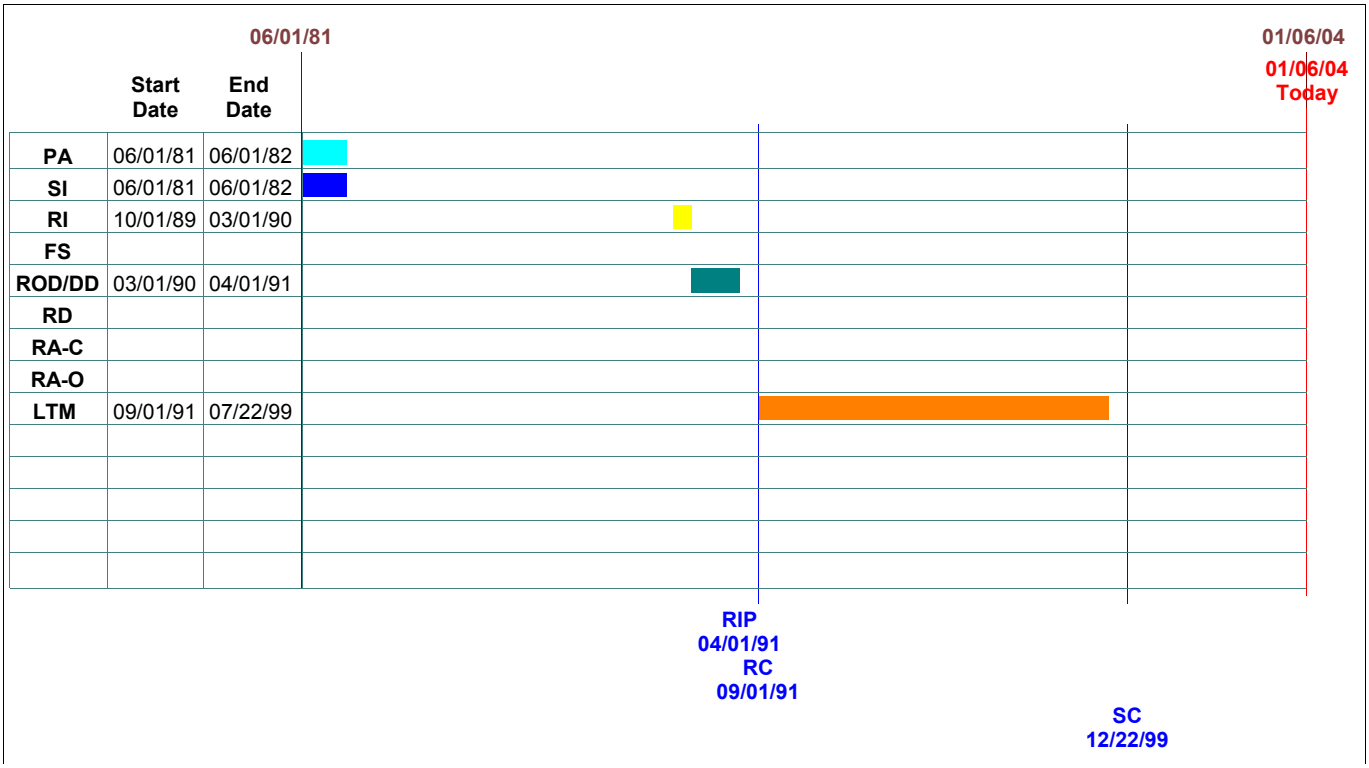
Site Name: Radioactive Waste Disposal Site 1022 East
Current site phase status: NFRAP IV
Relative Risk: NR
Prior year funding (FY03): $0
Current funding (FY04): Displayed only for internal release
Future funding (FY05-Finish): $0

Site description:

This site has final remedy in place.

Site Phase Schedule

MAJCOM: AFMC **Installation:** TINKER **Site ID:** RW029
Relative Risk: NR



	Start Date	End Date
PA	06/01/81	06/01/82
SI	06/01/81	06/01/82
RI	10/01/89	03/01/90
FS		
ROD/DD	03/01/90	04/01/91
RD		
RA-C		
RA-O		
LTM	09/01/91	07/22/99

WP030

Site Name: Pit Q-51
Current site phase status: NFRAP IV
Relative Risk: NR
Prior year funding (FY03): $0
Current funding (FY04): Displayed only for internal release
Future funding (FY05-Finish): $0

Site description:

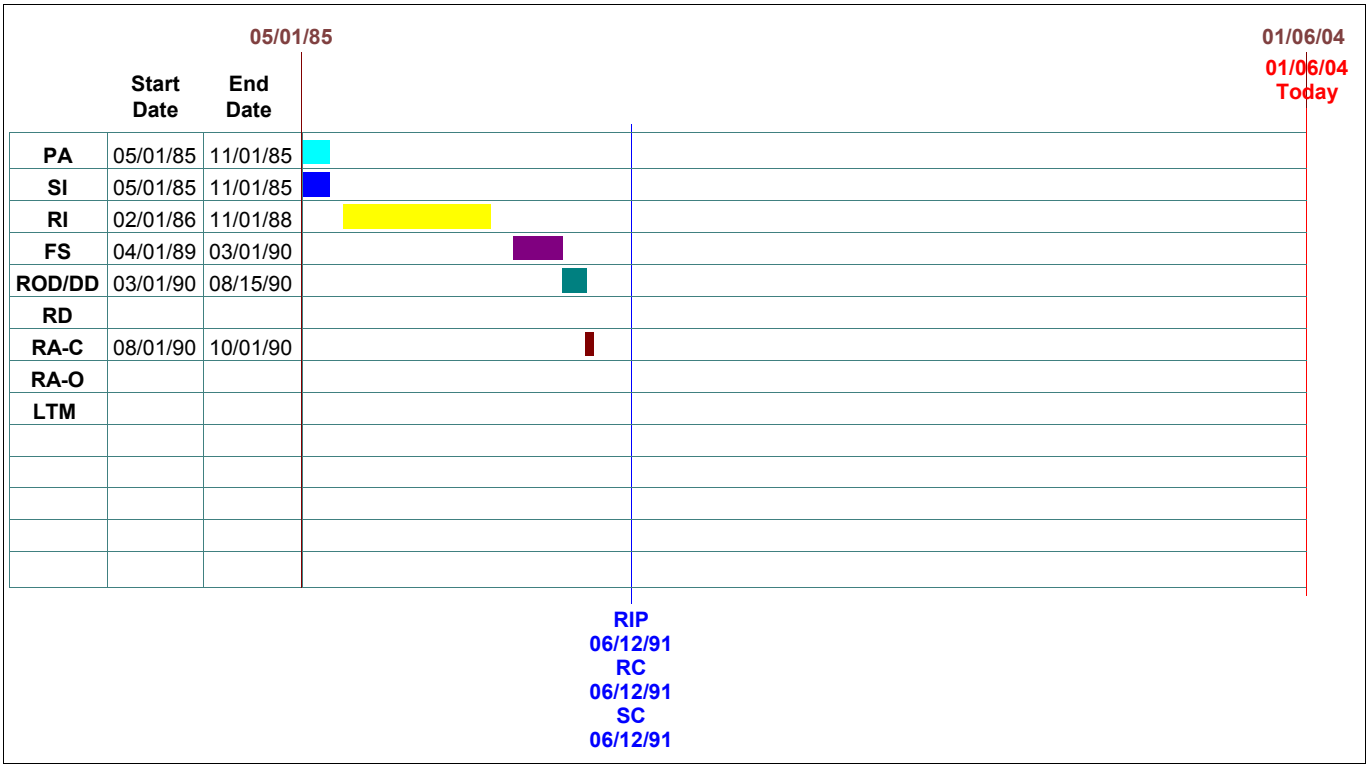
This site has final remedy in place.

Remedy Type:

Remedy Type	Phase	Start Date	End Date
Capping	RA-C	08/01/90	10/01/90

Site Phase Schedule

MAJCOM: AFMC **Installation:** TINKER **Site ID:** WP030
Relative Risk: NR



	Start Date	End Date
PA	05/01/85	11/01/85
SI	05/01/85	11/01/85
RI	02/01/86	11/01/88
FS	04/01/89	03/01/90
ROD/DD	03/01/90	08/15/90
RD		
RA-C	08/01/90	10/01/90
RA-O		
LTM		

OT031

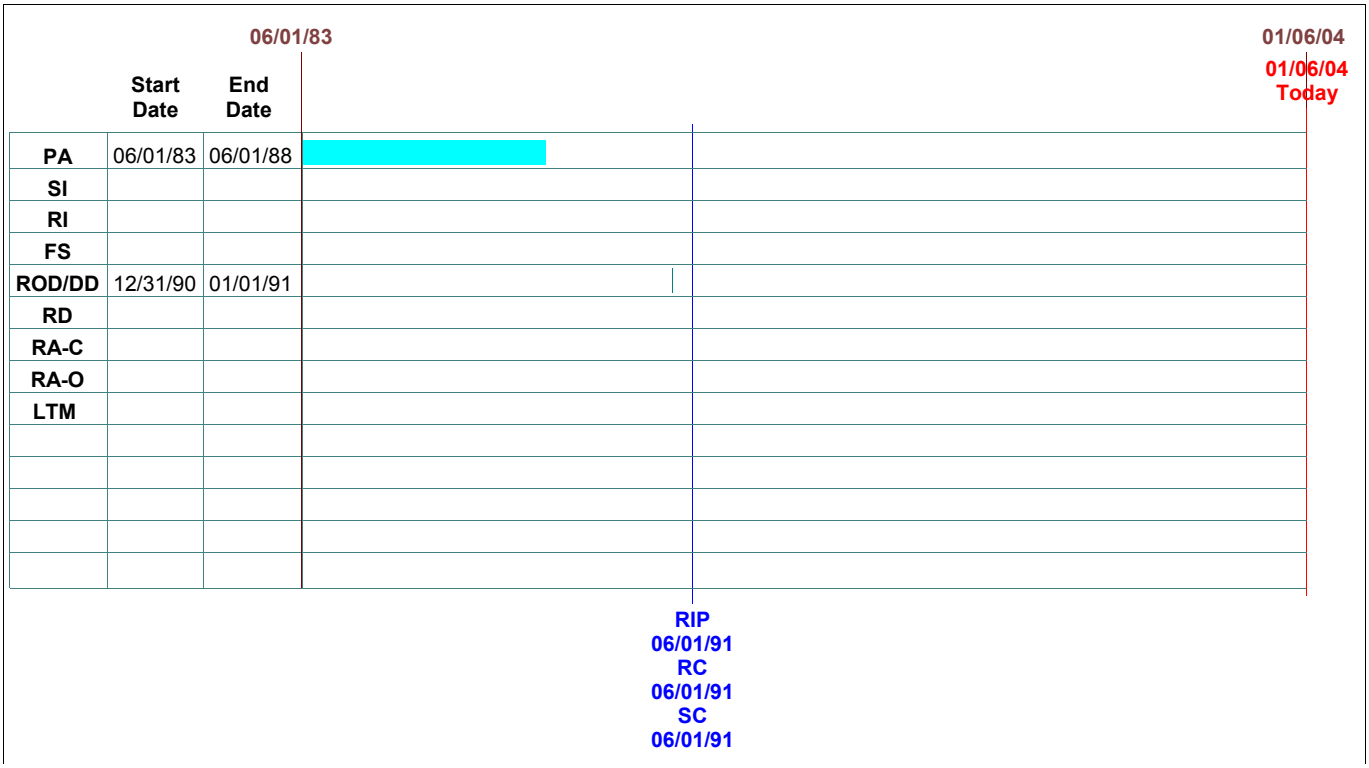
Site Name: Bonnewell
Current site phase status: NFRAP I
Relative Risk: NR
Prior year funding (FY03): $0
Current funding (FY04): Displayed only for internal release
Future funding (FY05-Finish): $0

Site description:

This site has final remedy in place.

Site Phase Schedule

MAJCOM: AFMC **Installation:** TINKER **Site ID:** OT031
Relative Risk: NR



	Start Date	End Date
PA	06/01/83	06/01/88
SI		
RI		
FS		
ROD/DD	12/31/90	01/01/91
RD		
RA-C		
RA-O		
LTM		

ST032

Site Name: 3700 Fuel Yard
Current site phase status: NFRAP IV
Relative Risk: NR
Prior year funding (FY03): $0
Current funding (FY04): Displayed only for internal release
Future funding (FY05-Finish): $0

Site description:

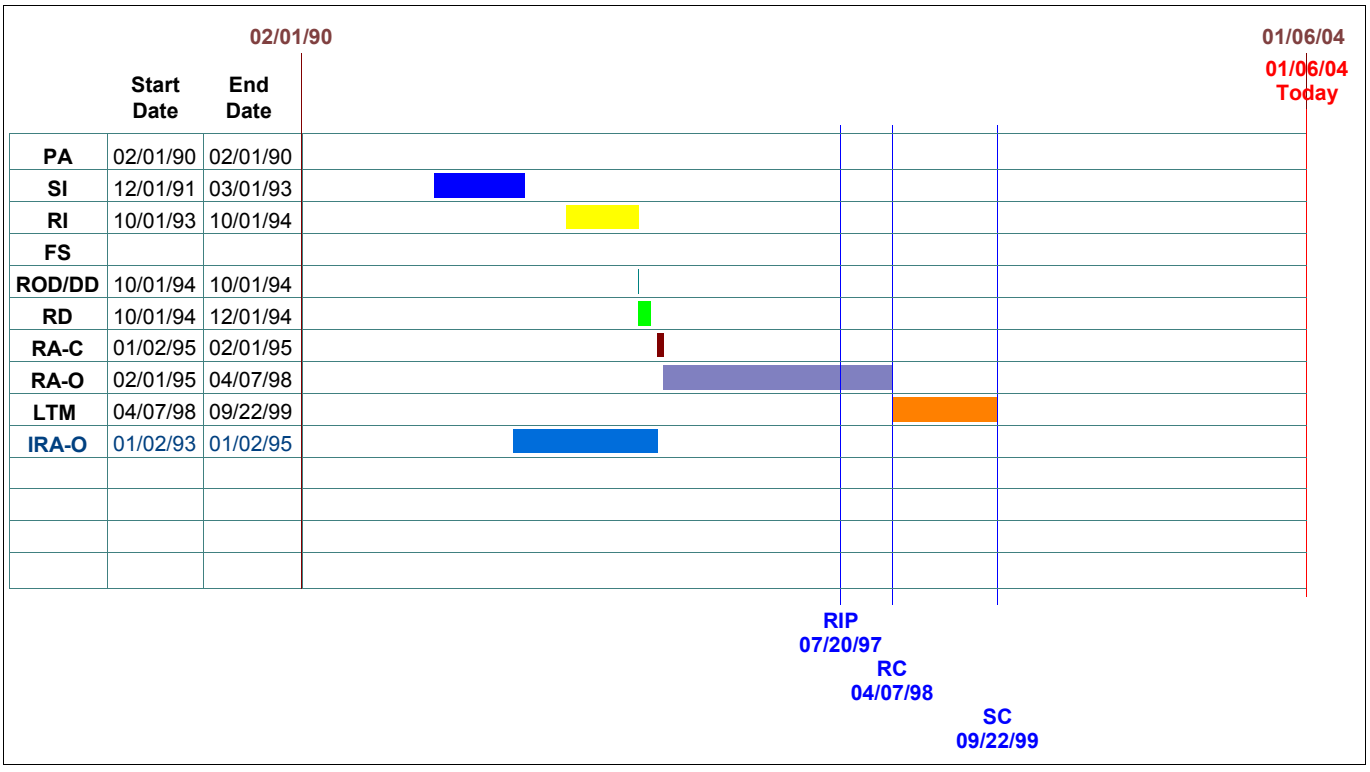
This site has final remedy in place.

Remedy Type:

Remedy Type	Phase	Start Date	End Date
Bioventing	IRA-O	01/02/93	01/02/95
Bioventing	RA-C	01/02/95	02/01/95

Site Phase Schedule

MAJCOM: AFMC **Installation:** TINKER **Site ID:** ST032
Relative Risk: NR



	Start Date	End Date
PA	02/01/90	02/01/90
SI	12/01/91	03/01/93
RI	10/01/93	10/01/94
FS		
ROD/DD	10/01/94	10/01/94
RD	10/01/94	12/01/94
RA-C	01/02/95	02/01/95
RA-O	02/01/95	04/07/98
LTM	04/07/98	09/22/99
IRA-O	01/02/93	01/02/95

ST033

Site Name: Area A Service Station
Current site phase status: RA-O
Relative Risk: NR
Prior year funding (FY03): $57,111
Current funding (FY04): Displayed only for internal release
Future funding (FY05-Finish): $154,000

Site description:

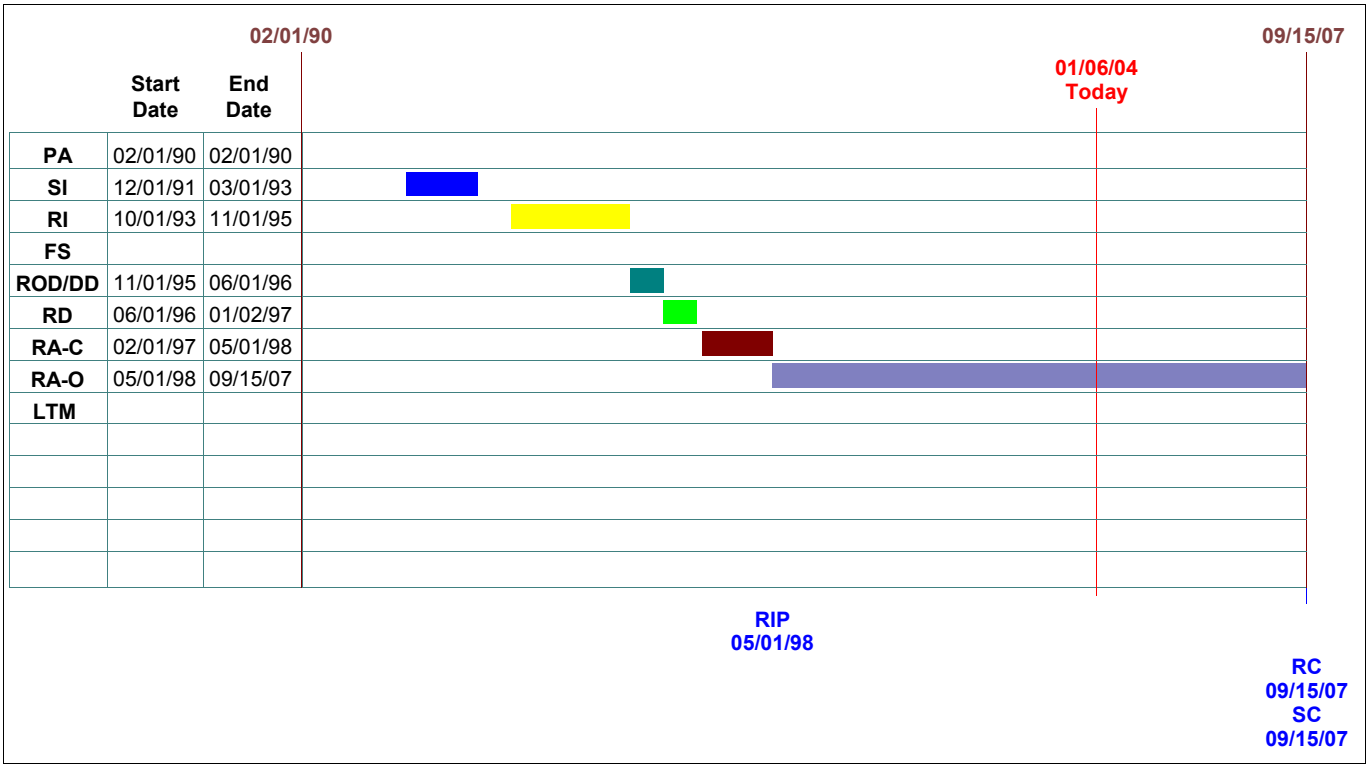
Area A Service Station served as Tinker AFB's refueling station for military vehicles from 1942 to 1992. During its years of service, leaded gasoline, unleaded gasoline, and diesel fuel were stored in four underground storage tanks.

Remedy Type:

Remedy Type	Phase	Start Date	End Date
Groundwater treatment	RA-C	02/01/97	05/01/98

Site Phase Schedule

MAJCOM: AFMC **Installation:** TINKER **Site ID:** ST033
Relative Risk: NR



	Start Date	End Date
PA	02/01/90	02/01/90
SI	12/01/91	03/01/93
RI	10/01/93	11/01/95
FS		
ROD/DD	11/01/95	06/01/96
RD	06/01/96	01/02/97
RA-C	02/01/97	05/01/98
RA-O	05/01/98	09/15/07
LTM		

OT034

Site Name:	IWTP and STP Soils
Current site phase status:	FS
Relative Risk:	MED
Prior year funding (FY03):	$61,205
Current funding (FY04):	Displayed only for internal release
Future funding (FY05-Finish):	$83,000

Site description:

The Sanitary Wastewater Treatment Plant (SWTP) was constructed in 1942 for the principal treatment of domestic wastewater generated at Tinker AFB. During the 1950's, increasing amounts of industrial wastewater discharges were added to the SWTP. In the mid 1950's Industrial Wastewater Treatment (IWTP) units were added to the plant. By the 1960's a separate IWTP had been added to the plant. By the 1960's a separate IWTP had been established at the plant with discharges to the SWTP. By 1972, both plants were completely separated with the IWTP treating concentrated waste stripping and electroplating solutions and the SWTP treating only domestic sewage. The wastewater treatment facility has processed numerous waste solutions over the past 52 years including cyanide solutions, paint stripping waste and solvents, acids, bases, electroplating solutions, and heavy metals. Numerous releases have been documented from the site and an existing groundwater plume is located immediately below the site. A vapor enhanced pumping system was put into operation to capture both soil vapor and groundwater in May 2000.

The migration pathway would be through direct contact with contaminated soil or soil vapor.

The human receptors are personnel employed at the site who could be exposed to soil contamination.

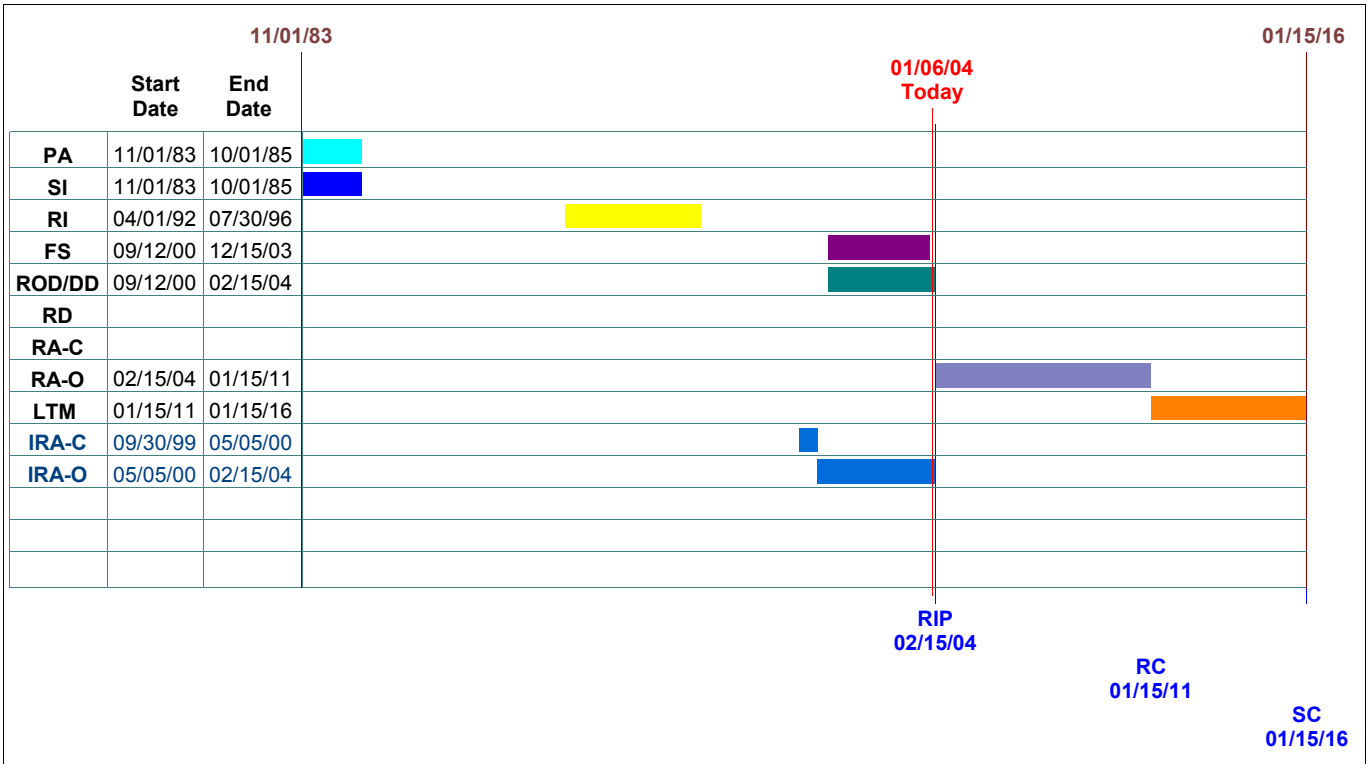
Remedy Type:

Remedy Type	Phase	Start Date	End Date
Soil vapor extraction	IRA-C	09/30/99	05/05/00
Soil vapor extraction	IRA-O	05/05/00	02/15/04

Site Phase Schedule

MAJCOM: AFMC **Installation:** TINKER **Site ID:** OT034

Relative Risk: MED



	Start Date	End Date
PA	11/01/83	10/01/85
SI	11/01/83	10/01/85
RI	04/01/92	07/30/96
FS	09/12/00	12/15/03
ROD/DD	09/12/00	02/15/04
RD		
RA-C		
RA-O	02/15/04	01/15/11
LTM	01/15/11	01/15/16
IRA-C	09/30/99	05/05/00
IRA-O	05/05/00	02/15/04

WP035

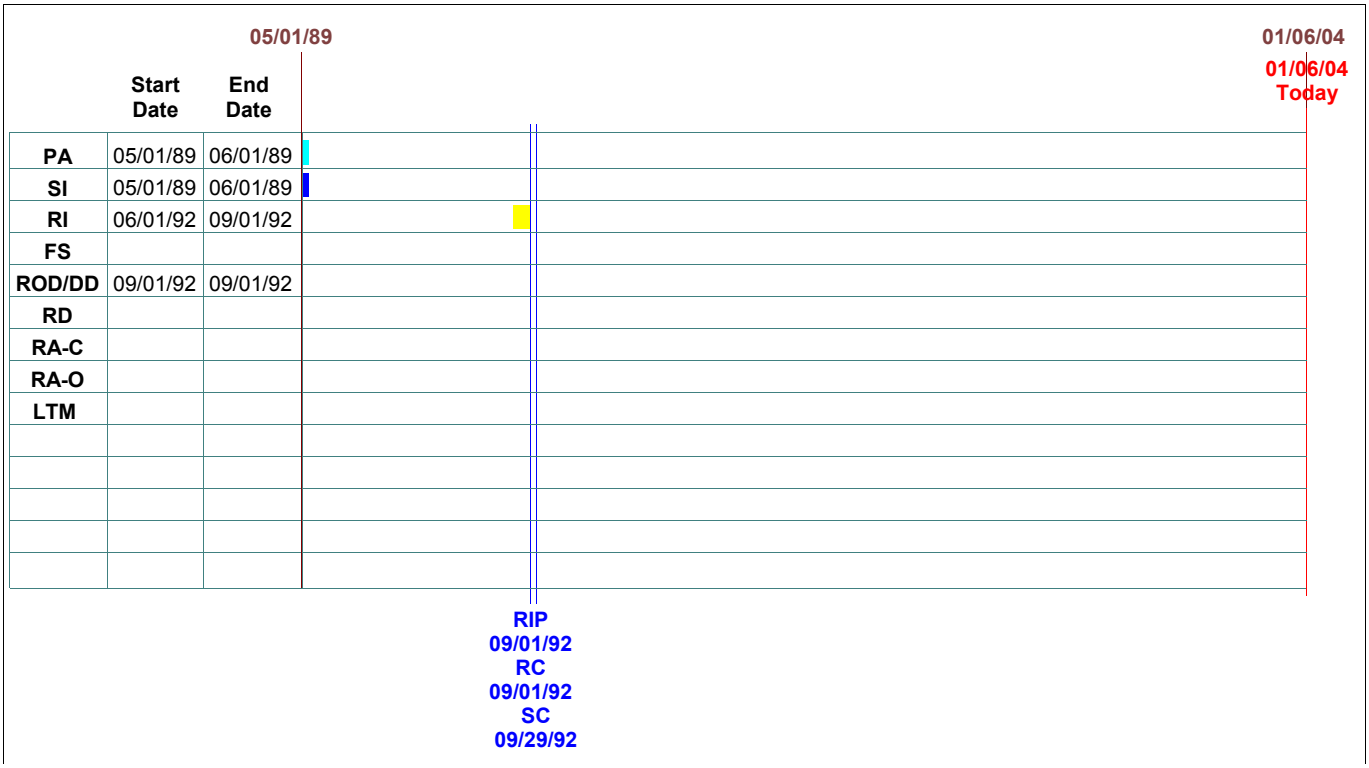
Site Name: Discharge Ditch, Building 17
Current site phase status: NFRAP III
Relative Risk: NR
Prior year funding (FY03): $0
Current funding (FY04): Displayed only for internal release
Future funding (FY05-Finish): $0

Site description:

This site has final remedy in place.

Site Phase Schedule

MAJCOM: AFMC **Installation:** TINKER **Site ID:** WP035
Relative Risk: NR



	Start Date	End Date
PA	05/01/89	06/01/89
SI	05/01/89	06/01/89
RI	06/01/92	09/01/92
FS		
ROD/DD	09/01/92	09/01/92
RD		
RA-C		
RA-O		
LTM		

WP036

Site Name: Purge Facility Turnaround Soils
Current site phase status: NFRAP III
Relative Risk: NR
Prior year funding (FY03): $0
Current funding (FY04): Displayed only for internal release
Future funding (FY05-Finish): $0

Site description:

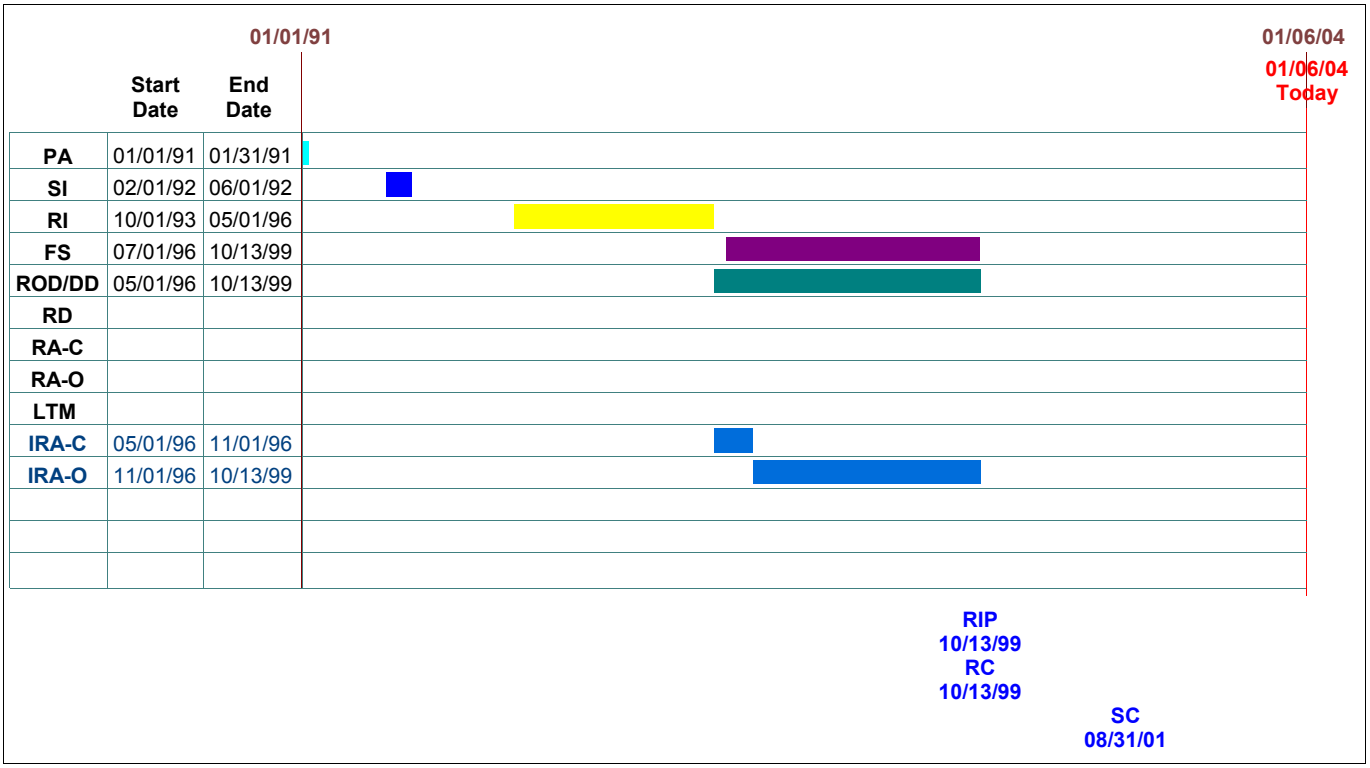
The original Fuel Purge Area was in operation form 1975 through 1990. Waste fuels (JP-4 and JP-5) were drained from aircraft in the maintenance facility and transported by truck to the FPA for disposal. The original FPA consisted of a 6 ft x 8 ft x 2 ft deep metal bunker located on base soil. The bunker was elevated about 1.5 ft above ground surface and was equipped with a steel ramp to accommodate trucks which were connected to the bunker via hoses for dumping. The bunker was connected by a steel pipe line to two aboveground storage tanks also on base soil approximately 310 feet south of the bunker. Fuel dumped into the bunker was allowed to gravity feed to the holding tanks. Approximately 1/3 of the pipe line was buried.

Remedy Type:

Remedy Type	Phase	Start Date	End Date
Bioventing	IRA-C	05/01/96	11/01/96
Bioventing	IRA-O	11/01/96	10/13/99

Site Phase Schedule

MAJCOM: AFMC **Installation:** TINKER **Site ID:** WP036
Relative Risk: NR



CG037

Site Name:	Northwest Groundwater Management Unit
Current site phase status:	ROD/DD
Relative Risk:	MED
Prior year funding (FY03):	$198,917
Current funding (FY04):	Displayed only for internal release
Future funding (FY05-Finish):	$829,000

Site description:

Based on contaminant distribution and type, this groundwater management unit appears to underlie an area possibly used for disposal of individually small amounts of solvents disposed of over a wide time span into topographically low areas. Solvents were probably used for cleaning of equipment, trucks and airplanes possibly as early as the 1950's.

Potential pathways include groundwater to water supply wells (base wells and Midwest City wells to the west and northwest).

Potential for human exposure to contaminated groundwater in this area exists because Tinker AFB and the surrounding communities of Midwest City and Del City derive their water supplies from the Garber-Wellington Aquifer (Class IIA), and surface water sources.

Contaminants of concern:

Media	Contaminant	Sample Result	Units
Ground water	Trichloroethylene (TCE)	1500	ug/L

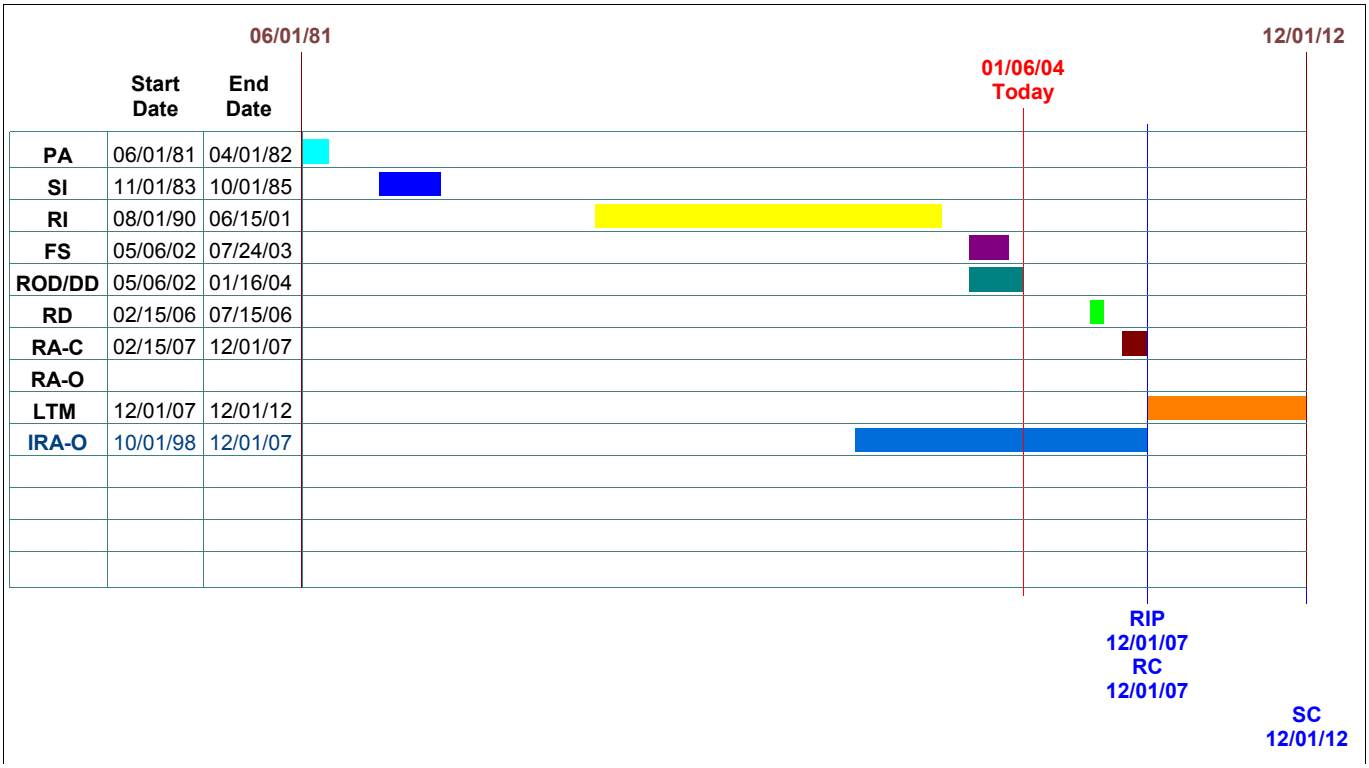
Remedy Type:

Remedy Type	Phase	Start Date	End Date
Long-term monitoring	IRA-O	10/01/98	12/01/07
Chemical reduction/oxidation	RA-C	02/15/07	12/01/07

Site Phase Schedule

MAJCOM: AFMC **Installation:** TINKER **Site ID:** CG037

Relative Risk: MED



	Start Date	End Date
PA	06/01/81	04/01/82
SI	11/01/83	10/01/85
RI	08/01/90	06/15/01
FS	05/06/02	07/24/03
ROD/DD	05/06/02	01/16/04
RD	02/15/06	07/15/06
RA-C	02/15/07	12/01/07
RA-O		
LTM	12/01/07	12/01/12
IRA-O	10/01/98	12/01/07

CG038

Site Name:	Southwest Groundwater Management Unit
Current site phase status:	FS
Relative Risk:	High
Prior year funding (FY03):	$1,529,860
Current funding (FY04):	Displayed only for internal release
Future funding (FY05-Finish):	$3,553,000

Site description:

The southwest groundwater management unit encompasses four (4) landfills (1942-1968) with several specific-use sludge disposal pits, a fire training area (1950-1970), a sewage impoundment (1954-1970), and a radioactive waste disposal site (1951-1960s). Wastes include general refuse, industrial and sanitary wastes, and low level radioactive waste. Groundwater contaminants are principally solvents and metals.

Multiple sites are located in close proximity to one another. Groundwater over a large area under this management unit is contaminated. The principal pathway is groundwater to down gradient private water supply wells, with a lower potential to nearby streams. Wells are within 200 feet of the plume. Most homes have private wells that intersect the same hydrogeologic units as the contaminated units on base.

Potential for human exposure to contaminated groundwater in this area exists because Tinker AFB and the surrounding communities of Midwest City and Del City derive their water supplies from the Garber-Wellington Aquifer (Class IIA), and surface water sources.

Contaminants of concern:

Media	Contaminant	Sample Result	Units
Ground water	1,2-Dichloroethane (EDC)	160	ug/L
Ground water	1,2-Dichloroethylene (cis)	180	ug/L
Ground water	Chromium	300	ug/L
Ground water	Trichloroethylene (TCE)	10000	ug/L
Ground water	Vinyl Chloride	11	ug/L

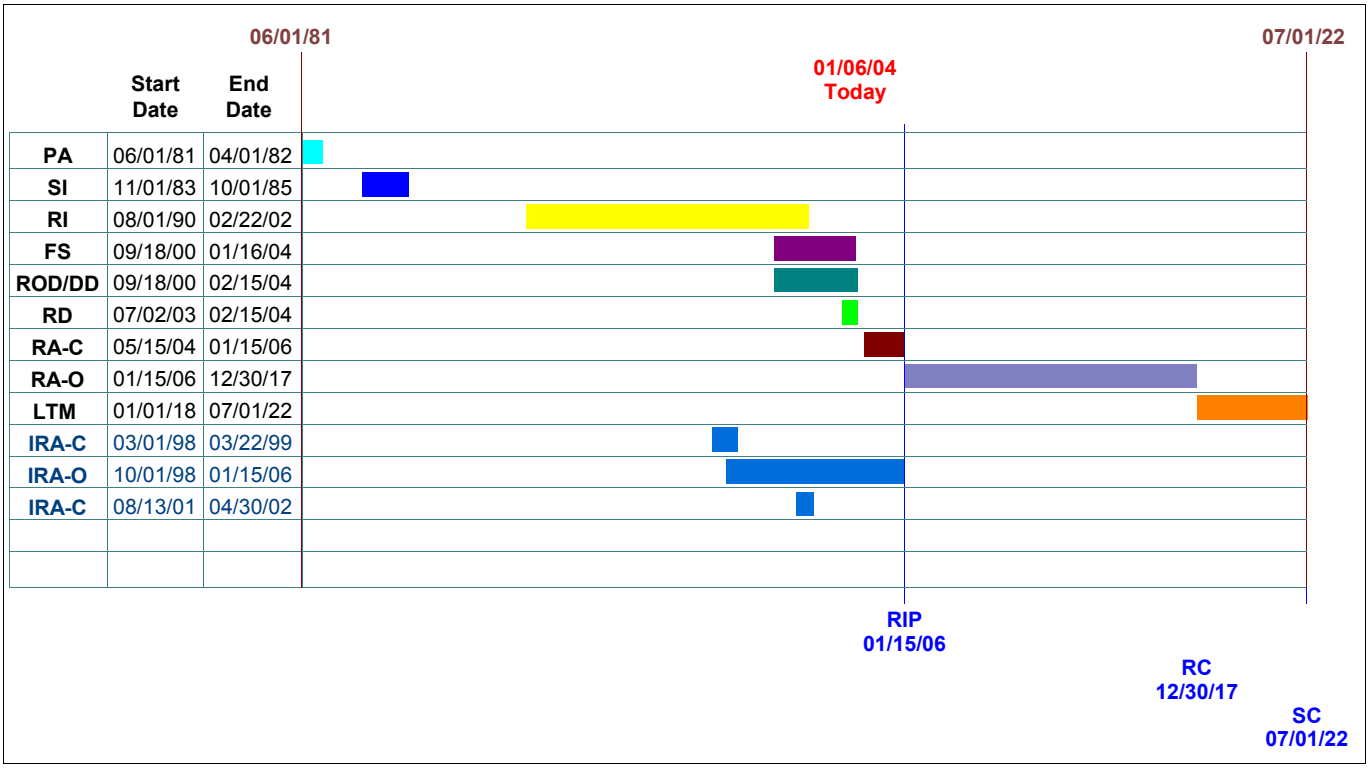
Remedy Type:

Remedy Type	Phase	Start Date	End Date
Groundwater treatment	IRA-C	03/01/98	03/22/99
Groundwater treatment	IRA-O	10/01/98	01/15/06
Alternate water supply/water supply treatment	IRA-C	08/13/01	04/30/02
Groundwater treatment	RA-C	05/15/04	01/15/06

Site Phase Schedule

MAJCOM: AFMC **Installation:** TINKER **Site ID:** CG038

Relative Risk: High



CG039

Site Name:	East Groundwater Management Unit
Current site phase status:	RI
Relative Risk:	High
Prior year funding (FY03):	$559,818
Current funding (FY04):	Displayed only for internal release
Future funding (FY05-Finish):	$494,000

Site description:

Groundwater management unit encompasses a waste pit (1947-1958), fuel sites, a landfill (1968-1970), truck maintenance facility (since 1957), and a fire training area (1962-1966). Waste pit received unspecified waste from plating and maintenance facilities. Groundwater contaminants include solvents and metals.

Primary pathway is groundwater to base drinking water supply wells. Five such wells are found within this area.

Potential for human exposure to contaminated groundwater in this area exists because Tinker AFB and the surrounding communities of Midwest City and Del City derive their water supplies from the Garber-Wellington Aquifer (Class IIA), and surface water sources.

Contaminants of concern:

Media	Contaminant	Sample Result	Units
Ground water	1,2-Dichloroethane (EDC)	31000	ug/L
Ground water	1,2-Dichloroethylene (cis)	830	ug/L
Ground water	Chromium	20000	ug/L
Ground water	Trichloroethylene (TCE)	13000	ug/L

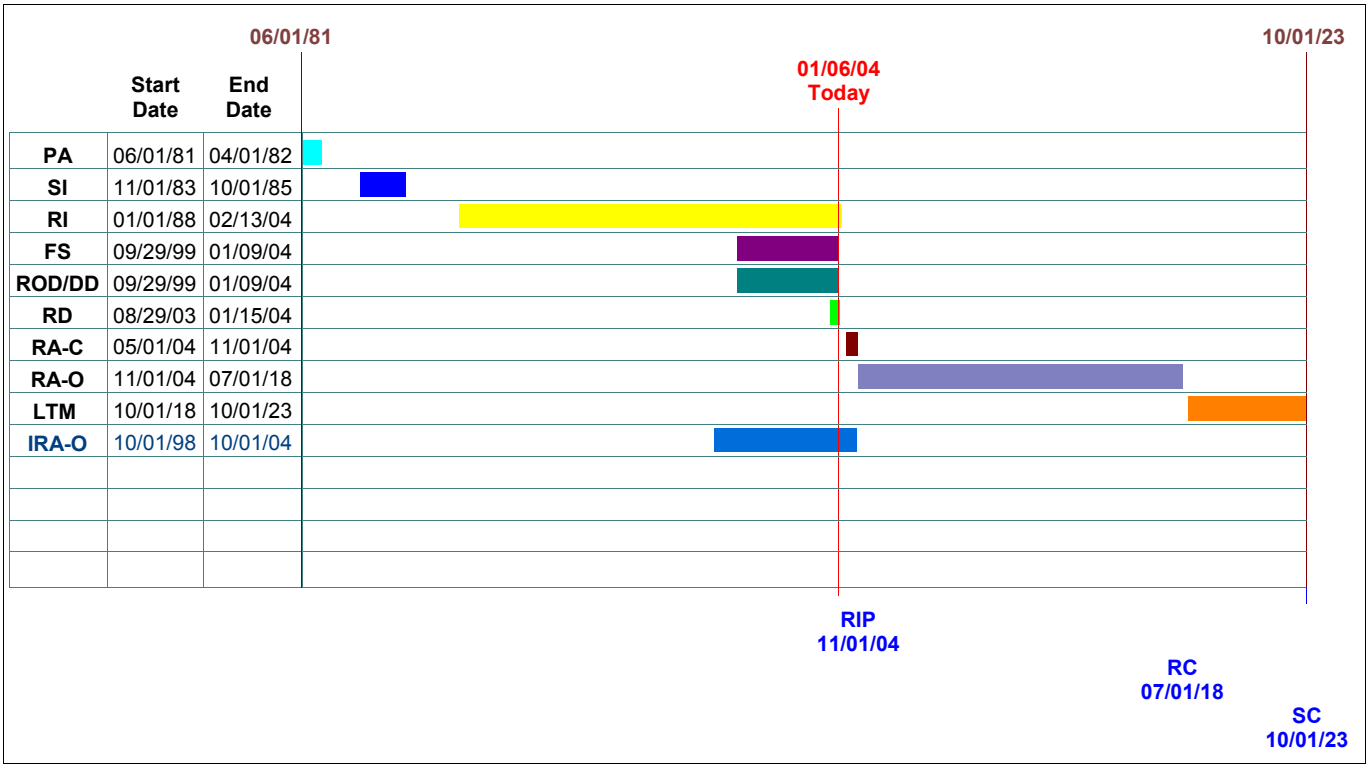
Remedy Type:

Remedy Type	Phase	Start Date	End Date
Long-term monitoring	IRA-O	10/01/98	10/01/04
Groundwater treatment	RA-C	05/01/04	11/01/04

Site Phase Schedule

MAJCOM: AFMC **Installation:** TINKER **Site ID:** CG039

Relative Risk: High



CG040

Site Name:	Gator Facility Groundwater Management Unit
Current site phase status:	RI
Relative Risk:	High
Prior year funding (FY03):	$107,650
Current funding (FY04):	Displayed only for internal release
Future funding (FY05-Finish):	$486,000

Site description:

This facility has been used since the 1950's for a training site for mobile communications groups. The contamination originated from the lateral lines of a septic tank, spills, and leaks that occurred during training exercises. The contaminates of concern are chlorinated solvents.

Identified pathway is groundwater to private wells that intersect contaminated aquifer zones. Potential pathway is surface water which is recharged by groundwater.

Potential for human exposure to contaminated groundwater in this area exists because Tinker AFB and the surrounding communities of Midwest City and Del City derive their water supplies from the Garber-Wellington Aquifer (Class IIA), and surface water sources. People swimming in nearby ponds and livestock drinking from nearby ponds are also potential receptors.

Contaminants of concern:

Media	Contaminant	Sample Result	Units
Ground water	1,2-Dichloroethylene (cis)	38	ug/L
Ground water	Trichloroethylene (TCE)	460	ug/L

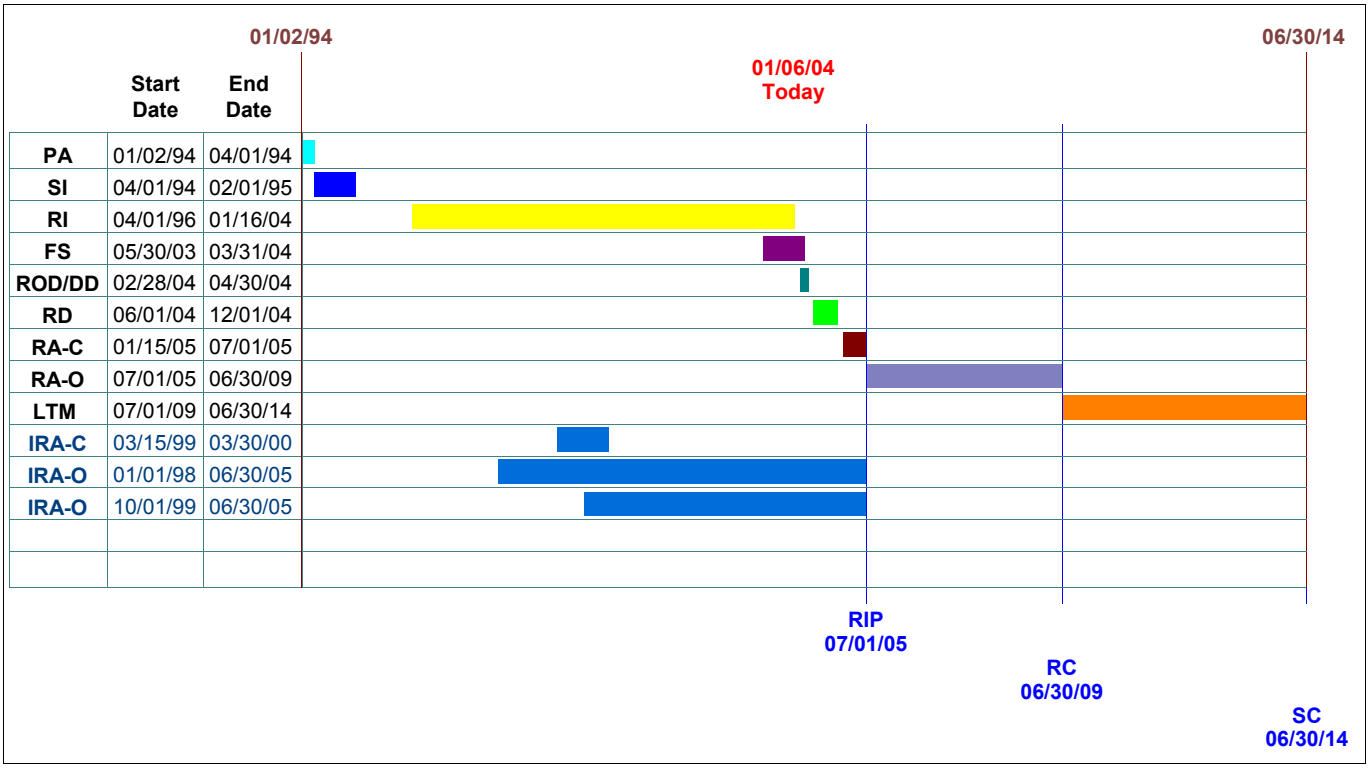
Remedy Type:

Remedy Type	Phase	Start Date	End Date
Long-term monitoring	IRA-O	01/01/98	06/30/05
Groundwater treatment	IRA-C	03/15/99	03/30/00
Groundwater treatment	IRA-O	10/01/99	06/30/05
Groundwater treatment	RA-C	01/15/05	07/01/05

Site Phase Schedule

MAJCOM: AFMC **Installation:** TINKER **Site ID:** CG040

Relative Risk: High



List of Acronyms and Abbreviations

ACRONYM	DEFINITION
ACC	Air Combat Command
ADW	11th Wing
AF	Air Force
AFA or USAFA	U.S. Air Force Academy
AFR	Air Force Reserves Command
AFRIMS	Air Force Restoration Information Management System
AMC	Air Mobility Command
ANG	Air National Guard
AOC	Area of Concern
AETC	Air Educational & Training Command
ARAR	Applicable or Relevant and Approprioate Requirement
BY	Budget Year
CEE or AFCEE	Air Force Center for Environmental Excellence
CERCLA	Comprehensive Environmental Restoration and Conservation Liability Act
CHF	Contaminant Hazard Factor
CMI	Corrective Measures Implementation
CMS	Corrective Measures Study (CMS)
CTC	Cost to Complete
DD	Decision Document
DoD	Department of Defense
D&N	Discovery and Notification
EPA	Environmental Protection Agency
EPI	Environment Priorites Initiative
ERP	Environmental Restoration Program
EY	Execution Year
FY	Fiscal Year
FS	Feasibility Study (CMS Report)
GW	Ground Water
ICM	Inventory Control Management
ILE	HQ USAF/ILEVR
IRA-C	Interim Remedial Action-Cleanup/Removal Action
IRA-O	Interim Remedial Action-Operation
IRP	Installation Restoration Program
LTM	Long-Term Management
LTO	Long-Term Operation (replaced by the site phase RA-O)
MAP	Management Action Plan
MAJCOM or MAJ	Major Command
MGT	Management – Project Phase
MHQ	Management Headquarters – Project Phase
MOM	Measure of Merit
MPF	Migration Pathway Factor
MPR	Manpower - Project Phase
MPR-S	Manpower Site Costs – Project Phase
MTC or AFMC	Air Force Material Command
NE	Not Evaluated (Relative Risk)
NFA	No Further Action
NFRAP	No Further Response Action Planned
NR	Not Required (Relative Risk)
NPL	National Priorities List
O&M	Operation and Maintenance

OU	Operable Unit
OY	Out-Year
PA	Preliminary Assessment
PAF or PACAF	Pacific Air Force Command
PA/SI	Preliminary Assessment/Site Inspection
PCO-C	Project Closeout Cleanup
PCO-S	Project Closeout Study
POM	Program Objective Memorandum
PP	Proposed Plan
RA-C	Remedial Action
RA-AOC	Removal Action at an Area of Concern
RAB	Restoration Advisory Board
RA-C	Remedial Action Construction
RA-O	Remedial Action Operation
RC	Response Complete
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RFA	RCRA Facility Asscessment
RFI	RCRA Facility Investigation
RF	Receptor Factor
RI	Remedial Investigation (RFI Report)
RIP	Remedy in Place
RI/FS	Remedial Investigation/Feasibility Study
RPM	Remedial Project Manager
ROD/DD	Record of Decision/Decision Document
RR	Relative Risk
SB	Statement of Basis
SC	Site Closeout or Site Complete
SED	Sediment
SI	Site Inspection
SOC or AFSOC	Air Force Special Operations Command
SPC or AFSPC	Air Force Space Command
SW	Surface Water
SWMU	Solid Waste Management Unit
TRC	Technical Review Committee
UST	Underground Storage Tank
UXO-RA	Unexploded Ordinance-Range Analysis, Cleanup, & Closeout
UXO-RI	Unexploded Ordinance-Range Identification